



THE EIGHTY-SECOND
ANNUAL REPORT
UPON THE
HEALTH OF LEICESTER
FOR THE YEAR 1930

BY
C. KILICK MILLARD, M.D., D.Sc.
MEDICAL OFFICER OF HEALTH.

APPENDICES

INCLUDING

- I. REPORT of the TUBERCULOSIS OFFICER.
- II. REPORT on the ISOLATION HOSPITAL AND SANATORIUM.
- III. REPORT on the CITY GENERAL HOSPITAL.
- IV. REPORT of the MATERNITY and CHILD WELFARE MEDICAL OFFICER.
- V. REPORT of the CITY ANALYST.
- VI. REPORT of the CHIEF SANITARY INSPECTOR.
- VII. REPORTS on the V.D. CLINICS.

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CITY OF LEICESTER.

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MR. ADAMS.	ALD. HAND, J.P.	MR. W. H. SMITH.
" CHAPPIN.	MR. HARRISON, J.P.	MRS. SWAINSTON.
" COOPER.	" JACKSON.	MR. J. M. WALKER.
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MISS FORTEY, J.P., B.SC.	" C. E. KEENE.	" WILFORD, J.P.
" FRISBY, J.P.	" RICHARDS.	" WINDLEY, J.P.

The Committee meets every alternate Friday in the Committee Room, Town Hall, at 3.30 p.m.

The Health Committee, together with the following co-opted members, not being members of the Town Council, constitute the Statutory Maternity and Child Welfare Committee :—Mrs. Banton, Mrs. Cooper, Mrs. Taylor, Miss E. J. Windley, B.A.

Accounts Sub-Committee.

MR. HARRISON.	MRS. SWAINSTON.
" RICHARDS.	ALD. WILFORD.

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MR. JACKSON.	ALD. T. W. WALKER.
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MR. C. E. KEENE.	ALD. WALKER.

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MR. CORT.	MRS. SWAINSTON.
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" COOPER.	MRS. SWAINSTON.
MISS FORTEY.	MRS. BANTON.
" FRISBY.	" COOPER.
MR. HINCKS.	" TAYLOR.
" JOHNSON.	MISS WINDLEY.

Maternity and Child Welfare Sub-Committee.

Necessitous Maternity Cases.

MRS. COOPER (Chairman).	MR. RICHARDS.
-------------------------	---------------

Maternity Home and Day Nursery Management Sub-Committee.

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MISS FORTEY.	MRS. BANTON.
" FRISBY.	" COOPER.
MR. HINCKS.	" TAYLOR.
" PARBURY.	MISS WINDLEY.
MRS. SWAINSTON.	

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MR. HINCKS.	MR. J. M. WALKER.
" JOHNSON.	ALD. T. W. WALKER.
" PARBURY.	" WILFORD.
" W. H. SMITH.	" WINDLEY.

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MR. CORT.	" RICHARDS.
MISS FORTEY.	MRS. SWAINSTON.
ALD. HAND.	MR. J. M. WALKER.
MR. JOHNSON.	ALD. T. W. WALKER.
" C. E. KEENE.	" WILFORD.

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" CORT.	" RICHARDS.
MISS FORTEY.	MRS. SWAINSTON.
" FRISBY.	MR. J. M. WALKER
MR. HARRISON.	

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" COOPER.	" RICHARDS.
" HINCKS.	

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MISS FORTEY.	" PARBURY.
" FRISBY.	" RICHARDS.
MR. HARRISON.	" J. M. WALKER

Staff of the Health Department.

(As constituted January 1st, 1931.)

Medical Officer of Health.

C. KILLICK MILLARD, M.D., D SC.

Assistant Medical Officers.

<i>Tuberculosis Officer and Assistant M.O.H.</i>	..	..	WYVILLE S. THOMSON, M.D., D.P.H.
<i>Assist. Tuberculosis Officer</i>	..	..	E. G. LAWRIE, M.B.
<i>Medical Supt. Isolation Hospital & Sanatorium.</i>	..	..	H. STANLEY BANKS, M.D., D.P.H.
<i>Assist. Medical Officers</i>	..	..	(J. H. WEIR, M.B. V. FREEMAN, M.R.C.S., D.P.H.)
<i>Medical Supt. City General Hospital</i>	..	..	E. C. HADLEY, M.D. (LOND.), F.R.C.S.E.
<i>Assist. Medical Officers</i>	..	..	(A. M. McQUEEN, M.D. D. C. LIDDLE, M.B.)
<i>Maternity and Child Welfare Officer</i>	..	..	E. B. B. HUMPHREYS, M.B.

Secretary of Health Department.

WILFRID CARR.

Matrons.

<i>Isolation Hospital and Sanatorium</i>	..	..	MISS E. A. DAVIES, R.R.C.
<i>City General Hospital</i>	..	..	.. L. K. MASTERS.
<i>Maternity Home</i>	..	..	.. EDITH BRADSHAW.
<i>Day Nursery</i>	..	..	.. ALICE M. MASON.

Public Analyst's Department.

<i>Public Analyst</i>	..	..	..	..	F. C. BULLOCK, B.SC., F.I.C.
<i>Assist. to Public Analyst</i>	..	..	..	..	J. G. LUNT, B.SC., A.I.C.
<i>Laboratory Assistant</i>	..	..	..	..	J. L. PINDER.

Clerical Staff.

<i>Chief Clerk, Sanitary Office</i>	..	..	..	T. P. POYNOR.
<i>General Clerks—</i>				
C. H. LANGRAN.	Miss M. L. CONDON.	Miss E. GALLIARD.		
F. KELLETT.	„ E. M. RIDDLE.	„ M. F. HALE.		
E. SLINGSBY.	„ D. R. POTTERTON.			
<i>Tuberculosis Dispensary</i>	..	..	..	(Miss J. HEATON.
				„ R. BREWARD.
<i>Isolation Hospital and Sanatorium</i>	..	..		(Mrs. ADAMS.
				Miss J. THOMPSON.
<i>City General Hospital—</i>				
<i>Steward</i>	..	..	..	E. H. BALL.
<i>Asst. Steward</i>	..	..	..	S. WHATSIZE.
<i>Clerks</i>	..	..	..	(Miss HALLAM.
				L. HEATHERLEY.
<i>Milk Depot</i>	..	..	..	(Mrs. BREWIN.
				Miss J. SIMPSON.

Sanitary Inspectors.

Chief Inspector F. G. McHUGH, 1 2 3 5

Inspectors—

S. W. BARKER, 5 6	W. MUSTON, 1 2
W. W. BAUM, 1 2 3 4 6	J. W. NORTH, 1 2
S. BEEVER, 1 2	T. PARRY, 1 2
R. T. BLAYLOCK, 1 2 3 9	W. J. PARKINSON, 1 2 7
M. C. CRIPPS, 1 2	A. T. PRICE, 1 2
J. ECKERSLEY, 1 2	M. TYLDESLEY, 1 2 5
H. ELKINGTON, 2 5	E. THOMPSON, 1 2
W. C. LONG, 1 2	J. YATES, 1 2

Health Visitors.

Superintendent MRS. REED, 10 11

District Health Visitors—

Miss L. CHAMBERS, 10 12	Miss E. R. MATTHEWS, 10 12
„ M. CONLON, 10 12 14	„ L. WALKER, 10
„ E. M. CRAGG, 10 11 12	MRS. M. E. WILLIAMS, 10 (part time).
„ D. JOHNSON, 10 12 14	Miss E. WILFORD, 10 12
„ A. KAVANAGH, 10 12 14	„ E. L. WOLLASTON, 10 12
„ D. L. MALLISON, 10 12 14	„ L. WRIGHT, 10 11 13
„ J. G. MASTERS, 10 11	

Manageress of Milk Depot. MRS. E. STANION, 11

Tuberculosis Nurses (Miss F. BEASLEY, 10 12
 „ E. MOUND, 10 12
 „ C. NEILL, 12

1. Holds Sanitary Inspector's Certif. Roy. San. Inst.
2. Holds Meat and Food Inspector's Certif. Roy. San. Inst.
3. Holds Certif. of Roy. San. Inst. for San. Science as applied to Buildings and Public Works.
4. Holds Smoke Inspector's Certif. of the Roy. San. Inst.
5. Holds Sanitary Inspector's Certif. under Public Health (London) Act, 1891.
6. Holds Meat and Food Inspector's Certif. under Public Health (London) Act, 1891.
7. Holds Sanitary Inspector's Certif. San. Inspectors' Assocn.
8. Holds Certif. of Roy. San. Inst. for Advanced Knowledge in Inspectors' Duties.
9. Holds Certif. of Incorp'd. San. Assocn. of Scotland for Meat and other Foods.
10. Holds Certif. of the Central Midwives' Board.
11. Holds Health Visitor's Certif. of the Roy. San. Inst.
12. Holds Certif. as fully 'Trained Nurse.
13. Holds Certif. for Maternity and Child Welfare Workers of the Roy. San. Inst.
14. Holds new Health Visitors' Certificate.
15. Holds State Registered Nursing Certificate.

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SUMMARY OF STATISTICS

FOR THE YEAR 1930.

CITY OF LEICESTER.

Population at Census, 1921	234,143
„ (estimated) at Mid-year 1930	..	..	..	245,200
Marriages	..	..	..	2,203
Marriage-rate	..	..	..	17.96
Births	..	..	..	3,872
Birth-rate	..	..	..	15.86
Deaths (corrected for transferable deaths)	..	..	..	2,744
Death-rate	..	..	..	11.20
Deaths under One Year	..	..	..	216
Infant Mortality (per 1,000 Births)	..	..	..	55.78
Zymotic-rate (per 1,000 population)	..	..	..	.42
Respiratory-rate	„	„	..	1.53
Cancer-rate	„	„	..	1.51
Tuberculosis-rate	„	„	..	1.10
Phthisis-rate	„	„	..	.92

Area of City (in acres)	..	..	..	8,582
Number of persons per acre at Census, 1921	..	..	..	27.2
Number of persons per Tenement at Census, 1921	..	..	..	4.28
Number of Inhabited Tenements, Census, 1921	..	..	..	54,657
Number of Inhabited Tenements, January, 1931	..	..	..	62,790
Number of Empty Houses, January, 1931	..	..	..	319
Number of Empty Cottages, January, 1931	..	..	..	60
Rateable value (1st November, 1930)	..	..	..	£1,596,567
General Rate for the year, 1930-31	..	..	..	14s. 1d. in the £

	England & Wales	107 Great Towns (Population exceeding 50,000)	London
	(For comparison).		
Birth-rate	..	16.3	16.6
Death-rate	..	11.4	11.5
Infant Mortality (per 1,000 Births)	..	60	64
	59

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HEALTH DEPARTMENT,
GREY FRIARS,
LEICESTER.

4th May, 1931.

To the Chairman and Members of the Health Committee.

MY DEPUTY LORD MAYOR, LADIES AND GENTLEMEN,

I beg to present my thirtieth Annual Report on the health of Leicester, viz., that for the year 1930.

The statistical retrospect for the year may be regarded as very favourable. The general death-rate was 11.2 per 1,000, this being the lowest recorded with the exception of one previous year. The tuberculosis death-rate was 110 per 100,000, this being quite the lowest figure ever recorded; and the infant mortality was 55.7 (per 1,000 births), this also being quite the lowest ever recorded, the previous lowest being 70.8 in 1928. The year 1930 was exceptionally favourable to infant life throughout the country, the infant mortality figure for England and Wales being 60 per 1,000, this being a record for the whole country. It is gratifying to find that in spite of the average rate for the whole country being so low, Leicester was well below the average.

Looking at the other side of the picture, it has to be recorded that deaths from cancer again showed an increase, and the cancer rate was the highest recorded except for the year 1926.

The outstanding event of the year was the coming into operation (on April 1st) of the Local Government Act, 1929, since when much of the work previously carried on by the Board of Guardians has devolved upon the Health Committee.

In particular, the Poor Law Infirmary at North Evington having been "appropriated" as a public health hospital, and re-christened the "City General Hospital, Gwendolen Road," passed under the control of the Corporation acting through the Health Committee.

A report by Dr. E. C. Hadley, Medical Superintendent, on the work of the institution, and covering the nine months, April 1st to December 31st, 1930, is submitted, and will be found at the end of this report (Appendix III.).

As has been stated above, this is the thirtieth Annual Report it has been my privilege to present as Medical Officer of Health for Leicester.

During the period covered by these reports great changes and many developments have taken place.

Of the 21 members who then constituted the Committee only three (Alderman Windley, Alderman Walker, and Councillor Richards) are still on the Committee, but three others (Alderman Sir Jonathan North, Alderman Banton and Alderman Parsons) are still members of the City Council.

In the early years of my term of office I was not only Medical Officer of Health, but also Public Analyst and Medical Superintendent of the Isolation Hospital. Then, when Maternity and Child Welfare work came along I was at first M. & C.W. Medical Officer as well. When Tuberculosis work came I gave up my work as Public Analyst, and with the great expansion of and additions to the work of the Health Department it became necessary to devolve very much of the work upon departmental officers specialising in one particular branch. How much further the work of the Department will continue to increase and expand it is impossible to foretell.

Necessarily, the staff of the Department has grown in proportion to the work, and to the increased appreciation of the importance of the work.

Although new and excellent Health Offices in Grey Friars were acquired in 1923 in place of the old and quite inadequate offices in the Town Hall, these new offices have already proved insufficient in some important respects, though great relief has been obtained by removing all the tuberculosis work to the new Tuberculosis Dispensary premises in Regent Road.

I would draw special attention to that section of the report dealing with housing and the problem of the slums.

The year under review has been a trying one for many of the staff owing to the wide-spread epidemic of minor smallpox, which although not at all serious clinically, has entailed a vast amount of extra work, and to all who assisted me in combating the outbreak my best thanks are due.

I would also express my indebtedness to our indefatigable Secretary, Mr. W. Carr, who has helped me most willingly on innumerable occasions.

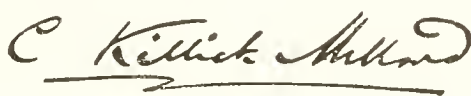
To the Chairman and individual members of the Committee I once again express my thanks for the courtesy and consideration ever extended to me.

In conclusion, I wish to draw attention to the valuable reports submitted by :—

Dr. W. S. Thomson, Tuberculosis Officer ;
Dr. H. Stanley Banks, Med. Supt. City Isolation Hospital ;
Dr. E. C. Hadley, Med. Supt. City General Hospital ;
Dr. E. B. Berenice Humphreys, M. & C.W. Medical Officer ;
Mr. F. C. Bullock, B.Sc., &c., City Analyst ;
Mr. F. G. McHugh, Chief Sanitary Inspector ;
and by the V.D. Medical Officers, Dr. H. J. Blakesley, and
Dr. Bessie Symington.

I am, Ladies and Gentlemen,

Your obedient servant,


Medical Officer of Health.

Medical Officer of Health's Report

FOR THE YEAR 1930.

PART I.

Statistical.

Population.

In view of the Census to be taken in April, 1931 (although the figures will not be available until some time later), the Registrar General has suggested that the estimate of population arrived at for 1929 should again be used for the year 1930. The population figure of 245,200 has therefore been used in calculating the statistics for 1930 in this report.

The City of Leicester, so long as it remains with its present boundaries, is not likely to increase in population very much. It may, indeed, have reached its maximum already. Comparatively little land within the City suitable for working class dwellings remains unbuilt on, so that not very many more new houses can be built in Leicester. On the other hand, population displaced in connection with slum clearance will have to be rehoused largely outside the City boundaries, so that in the future the population may even decline, unless in the meanwhile the City boundaries are extended.

According to the Registrar General's estimate, the population of Leicester during the past five years, has only increased from 242,100 to 245,200, an increase of 3,100, or approximately only a little over one per cent.

Marriages.

The number of marriages solemnised in Leicester during the year was :—

In Church of England	..	..	1,080
Elsewhere	..	..	1,123
<hr/>			
Total	..	..	2,203

The marriage-rate per 1,000 was 17.96. The figure for the previous year was 19.17.

Births.

The corrected number of births for the year was 3,872, of which 2,120 were males, and 2,051 were females. This is an increase of 424 on the previous year.

The **Birth-rate** was **15.80** as compared with 15.29 for the previous year, which was the lowest figure ever recorded, excluding certain years of the Great War. This slight increase is a little encouragement for those who deplore a falling birth-rate.

Still-Births.

The number of still-births notified was 152, viz., 91 by midwives and 61 by doctors. The number of still-births interred at the City Cemeteries was 180, showing that some still-births still escape notification.

Illegitimacy.

The number (corrected) of illegitimate births was 218, equal to 5.2 per cent. of the total births. The figure for the previous year was 6.2 per cent.

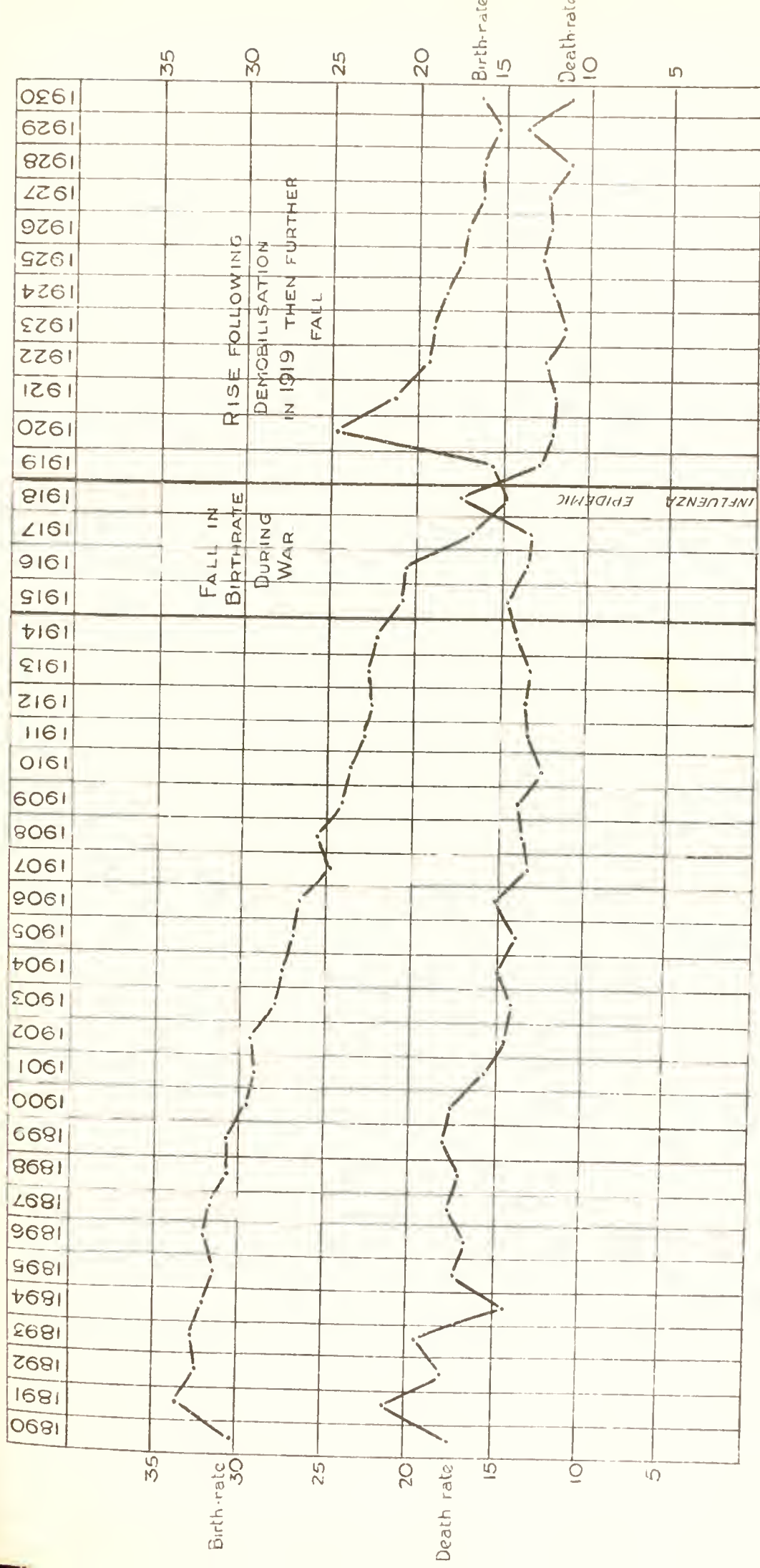
Deaths.

The number of deaths of persons properly belonging to Leicester, after making the usual corrections for institutional and transferable deaths was 2,744, of which 1,407 were in males, and 1,337 in females. The number is 673 less than in the previous year.

The **Death-rate** was **11.2** per 1,000. This figure is the lowest hitherto recorded with the exception of the year 1928, when it was only a very small fraction lower, viz., 11.17 (practically the same figure). The accompanying graph, No. 1, shows the position as regard birth and death rates in past years at a glance.

The death-rate for England and Wales was 11.4 and for the 107 Great Towns was 11.5.

BIRTH AND DEATH RATES IN LEICESTER 1890-1930.



Infant Mortality.

The reduction in infant mortality which has been effected in the past 40 years, is one of the outstanding phenomena associated with the vital statistics of this country, and it is one which sanitarians can justifiably regard with pride.

It is with much satisfaction therefore, that we are able to report that for the year 1930 the infant mortality in Leicester easily reached the lowest point ever recorded hitherto.

The corrected number of deaths of infants under one year of age was only 216, and this, calculated per 1,000 births, gives an infant mortality of only **55.78**.

The lowest figure previously recorded was 70.8 for the year 1928. It will be seen, therefore, that the figure for 1930 has not merely broken the record, but has very greatly lowered it, viz., by approximately 15 per 1,000. Such a big drop is certainly most remarkable, though a very low infant mortality during 1930 was general throughout the whole country.

ZYMOTIC DEATH-RATE.

The deaths from zymotic diseases were as follows:—

Enteric Fever	..	..	..	1
Smallpox (Minor)	..	..	..	1
Measles	..	..	..	5
Scarlet Fever	..	..	..	2
Whooping Cough	..	..	..	8
Diphtheria	..	..	..	7
Diarrhoea and Enteritis	..	..	..	33
Influenza	..	..	..	27
Encephalitis	..	..	..	8
Cerebro-Spinal Fever	..	..	..	4
Poliomyelitis	..	..	..	1
Erysipelas	..	..	..	0
Puerperal Fever	..	..	..	8
Total				105

The zymotic death-rate (based on the above figures) was 0.42 per 1,000, as compared with 1.42 in the previous year, a satisfactory figure.

In addition to the above deaths, there were 206 deaths from pneumonia.

For particulars of zymotic deaths in previous years, see Table 8.

COMPARATIVE WARD STATISTICS.

The great object of vital statistics is comparison and only by reducing figures to statistics can a satisfactory comparison be made.

Leicester is divided into 16 Municipal Wards, the population of which is estimated approximately from the number of inhabited houses. The different wards vary greatly as regards size, altitude, geographical position in relation to the rest of the City, and in the social status of their inhabitants. The more favoured wards are situated on the outskirts, to the south and south-west of the City, and although none are purely "residential," Knighton Ward is very largely so, as also, to a less extent, are Westcotes and Spinney Hill. Several wards, such as Belgrave, Latimer, the Castle and the Abbey Wards, are chiefly good "working-class" districts, whilst some, such as Newton, St. Margaret's and Wyggeston, include the poorer and more "slummy" districts of the City.

Following the practice of previous years, we give below the wards with the highest and lowest rates during 1930.

Ward Death-Rates.

Highest.			Lowest.		
Wycliffe	..	17.5	Aylestone	..	7.8
Castle	..	11.9	Spinney Hill	..	8.6
De Montfort	..	11.6	Belgrave	..	8.7
St. Martin's	..	11.4	W. Humberstone		9.1

The high death-rate in Wycliffe Ward is certainly surprising and following as it does upon a high rate in previous years it calls for comment. Wycliffe Ward is divided into two unequal areas by the L.M.S. Railway, the inner and smaller area being a poor-class district of a distinctly "slummy" character, whilst the outer and larger area largely comprises comparatively good streets and substantial though not modern houses.

It is difficult to explain why there should be such an unfavourable death-rate in this ward, though the fact that there may be an undue proportion of elderly people residing in the district may perhaps partially account for it. As a set-off against the high general death-rate, it will be seen below that Wycliffe comes amongst the wards having the lowest phthisis mortality.

It is satisfactory to find that for once the wards which have so often figured amongst those with the highest death-rate, viz. : Newton, St. Margaret's and Wyggeston Wards, have for the year 1930 escaped this unenviable position.

On the other hand, however, it will be seen from the figures below that Wyggeston, St. Margaret's and Newton Wards were amongst those having the highest phthisis mortality.

Ward Phthisis-Rates.

Highest.			Lowest.		
Wyggeston	..	1.50	Knighton	..	0.23
Charnwood	..	1.33	St. Martin's	..	0.52
St. Margaret's	..	1.32	Westcotes	..	0.61
Newton	..	1.15	Spinney Hill	..	0.64

Ward Birth-Rates.

Highest.			Lowest.		
Wyggeston	..	22.4	De Montfort	..	7.8
Aylestone	..	16.9	Knighton	..	9.0
St. Margaret's	..	16.7	Wycliffe	..	9.9
Belgrave	..	15.1	Abbey	..	11.4

Ward Infant Mortality Rates.

Highest.			Lowest.		
Wycliffe	..	104	Knighton	..	31
St. Margaret's	..	79	The Castle	..	38
Latimer	..	72	St. Martin's	..	38
W. Humberstone		68	The Abbey	..	42

Here again Wycliffe must have a bad mark for having had the highest infant death-rate of any ward. The best that can be said is that the number of births in this ward was not very large (105) and the actual number of infant deaths during the year was eleven. With such small figures two or three infant deaths more or less may make all the difference between a low or a high infant mortality.

VITAL STATISTICS IN OTHER LARGE TOWNS.

In Table 23 are given the more important statistics of 38 towns with populations over 100,000, so that Leicester's position compared with other towns can be studied.

As regards birth-rate, Leicester came 14th on the list, but was definitely below the average (15.8 compared with 17.2).

As regards death-rate, Leicester came tenth on the list, being rather below the average (11.0 compared with 11.5).

As regards infant mortality, Leicester came fifth on the list, being very much below the average (55 as compared with 68). The four towns with lower infant mortality rates than Leicester were, Southend (37), Norwich (45), Brighton (51), and Stockport (53).

The towns with the highest rates were Gateshead (88), Birkenhead (85), Blackburn (84), and Rhondda (84). A few years ago we should have regarded such figures as very low.

As regards diphtheria mortality, only two towns—Bolton and Newcastle-on-Tyne—had a lower figure.

PART II.

Zymotic and other Specific Diseases or Causes of Death.

MINOR SMALLPOX (*Variola Minor*).

Cases during the year, 1,192. Deaths, 1.

Minor smallpox caused more trouble during 1930 than in any previous year, the total number of cases reported being no less than 1,192.

The course of the disease during past years has been briefly as follows:—

Smallpox was absent from the City from 1905 till 1924, with the exception of two solitary imported cases which caused no spread. In 1924, there were five cases, and in 1926, there was a definite epidemic resulting in 72 cases. From July in that year until May 1928 the City remained quite free. It was then re-introduced and again became epidemic, 90 cases occurring in 1928, and the epidemic was not subdued until May of the following year, 1929, when the smallpox hospital became empty and was again opened for tuberculosis cases. Unfortunately, the freedom of the City from smallpox was of short duration. The disease was re-introduced in September, 1929, and the Anstey Lane Hospital had to be again opened for smallpox. The disease has been present in epidemic form ever since then, a period, up to the time of writing (April, 1931), of a year and eight months, though if the previous outbreak be added, the total period, with a brief interlude included, becomes three years.

Year.			Cases.
1924	..	..	5
1925	..	..	72
1926	..	..	—
1927	..	..	7
1928	..	..	90
1929	..	..	320
1930	..	..	1,192

The following Table shows the number of cases occurring monthly since May, 1928.

(In 1926 there were no cases. In 1927 there were seven cases resulting from four separate importations of the disease.)

1928.			1930.		
January	..	—	January	..	138
February	..	—	February	..	138
March	..	—	March	..	138
April	..	—	April	..	148
May	..	9	May	..	148
June	..	—	June	..	69
July	..	9	July	..	67
August	..	2	August	..	36
September	..	1	September	..	31
October	..	17	October	..	39
November	..	22	November	..	67
December	..	30	December	..	173
Total	..	90	Total	..	1,192

1929.			1931.		
January	..	36	January	..	376
February	..	22	February	..	341
March	..	29	March	..	243
April	..	15	April	..	114
May	..	5	May	..	97
June	..	—			
July	..	1			
August	..	—			
September	..	6			
October	..	27			
November	..	68			
December	..	111			
Total	..	320			

The figures indicate that during 1930 (the year under review) the epidemic declined very much during the summer and autumn, but went up rapidly in December. The December increase was remarkably sudden and unexpected, and continued through January and February of the present year. For a matter of three months the Health Department was very hard pressed, having to deal with over 900 cases in the space of twelve weeks. Fortunately, in March a substantial decline set in, and the number of fresh cases fell rapidly.

Condition as to Vaccination.

This may be classified as follows :—

Vaccinated	..	..	..	80
Unvaccinated	..	..	..	1,111
Vaccination doubtful (thought to have been vaccinated, but no scars visible)	..	..	..	1
Total				1,192

One of the cases classed as unvaccinated, a male of 39, stated that he had been three times vaccinated in the army but that it never took.

Another case, a female of 72, stated that she had been vaccinated two or three times but never successfully.

The one case classed as "doubtful" was a male of 37 (Case No. 723) who "thought" he had been vaccinated in infancy, but showed no vaccination scars.

Sex Distribution.

Of the 1,192 cases in 1930, 534 were in males and 658 in females. The excess of females is doubtless accounted for, to some extent, by the fact that a considerable proportion of the adult male population in Leicester were vaccinated as soldiers during the Great War. None of the men of this class and having vaccination marks contracted the disease.*

Age Distribution.

The ages of the cases were as follows :—

Age Period.	No. of Cases.
0—1	23
2—4	36
5—14	344
15—29	516
30—59	246
60 and over	27
Total	1,192

* One man (case No. 1163) who stated that he had been vaccinated during the War contracted the disease, but, although careful search was made, no vaccination scars were discoverable. It is very probable that he was confusing "vaccination" with "inoculation," a mistake not infrequently made. If he was vaccinated it is clear from the absence of scars that it did not take. Two other men vaccinated during the War and having some slightly suspicious symptoms were under observation for a short time, but it was decided that they were not cases of smallpox.

Clinical Character of the Cases.

Most of the cases were of a very mild, indeed trivial character. Constitutional disturbance is practically limited to the pre-eruption stage of the disease. For three or four days patients are ill with symptoms suggestive of influenza—viz.: headache, pain at the bottom of the back, feverishness, and sometimes vomiting or a feeling of nausea. Perspiration at night, often serious, is rather a common symptom. The symptoms come on suddenly and pass off quickly and usually completely, either when the eruption appears or a day or two beforehand. The eruption varies greatly in amount.

Classifying the cases treated in hospital according to the amount of eruption we find as follows:—

	No. of Cases.
1. Very slight in amount	.. 793
2. Slight ,,	.. 238
3. Moderate ,,	.. 75
4. Profuse ,,	.. 10

The above figures must be taken as approximate only. So much depends, in a classification on such an elastic basis, upon the personal opinion of those who make the record.

Particulars of the One Fatal Case.

Only one out of the 1,192 cases occurring in the year 1930, proved fatal. This fact illustrates how very mild minor smallpox really is. The particulars of this one case were as follows:—Case No. 80. Aubrey F., age 3 weeks, was taken ill on January 13th, eruption (very profuse) appeared on 15th; child died on 19th. Had never been vaccinated. The child was one of a family of seven children. The mother and elder brother were admitted with smallpox at the same time. The last fatal case of smallpox in Leicester occurred in 1904, i.e., 26 years before.

Another case which died in hospital, though not from smallpox, should be mentioned here.

M.F., age 20, was admitted to the Smallpox Hospital on February 4th from the Leicester Royal Infirmary where she had been admitted (from the County) suffering from cerebral tumour. The smallpox eruption was very slight. Three days after admission the young woman suddenly complained of severe headache, vomited and died. The mode of death is such as might have been expected from cerebral tumour and was certified accordingly.

Three other patients were admitted from Royal Infirmary—one after an operation for appendicitis, another with heart disease,

and one after an operation for empyæma. All these patients did well.

One medical practitioner was admitted as a patient. He was 30 years of age and was stated to have been vaccinated in infancy, though no vaccination scars were discovered. He had never been re-vaccinated. It is remarkable that a medical man should be content to visit smallpox cases without having ever been re-vaccinated.

Hospital Accommodation.

During the greater part of the year under review it was possible to treat all cases in hospital. Only a few cases—where the persons concerned were very anxious to remain at home and had good facilities for home isolation—being allowed to remain at home. But when the sudden rush of cases occurred in December the accommodation at Anstey Lane Hospital quickly became exhausted. It was then decided to open a block of 30 beds at the Groby Road Isolation Hospital for slight and convalescent cases of smallpox, and when this proved insufficient a second block of 30 beds was also opened and remained in use for about 6 weeks during the most critical time. At the same time the policy was definitely adopted of treating a substantial proportion of cases at home wherever home isolation was at all practicable.

As this step marked a new departure of some importance, which may be of interest to other towns faced with a widespread outbreak, and was begun during the year under review although chiefly practised in 1931, it may be well to enlarge upon it.

The factors taken into consideration before a decision is made as to whether a case should be treated at home or not are :

- (1) The possibility of isolating the patient in a room to himself.
- (2) The number of other persons in the house and the number going to work.
- (3) The presence of some responsible person, not going to work, who can look after the patient, preferably of course someone who is, or who is willing to be, protected against the disease by vaccination.
- (4) The existence of any business in connection with the house.
- (5) The character as regards trustworthiness (so far as this can be judged) of the people concerned.
- (6) The wishes of the householder.

As showing the extent to which it was found practicable to treat cases at home, at a time of great pressure upon our hospital accommodation, it may be mentioned that during the three months, January—March, 1931, 365 out of 967 cases, or 38 per cent., were treated at home, and the result was apparently quite satisfactory. No fresh cases, outside the houses concerned, were traced to cases which were treated at home, and in March when the practice was in full swing, so to speak, a rapid decline in the epidemic occurred.

At the same time I should have been sorry to have been obliged to keep a larger proportion than, say, 40 or at most, 45 per cent. at home. Had we not been able to remove the other 50 or 60 per cent. to hospital it is possible that the attempt to control the disease might have broken down, and probably we should have been exposed to public criticism. As it was, we were able to manage very well, and we successfully coped with what threatened to be a very difficult situation.

Contacts Admitted to Hospital.

It occasionally happens that individuals need to be removed to hospital although not suffering from smallpox at the time of removal. There are various causes for this.

(1) Young babies whose mothers have developed smallpox and where it is not desirable to separate mother and babe.

(2) Rather older children, if there is no one willing or able to look after them in the absence of the mother.

(3) Persons who have been in close contact with the disease and show some symptoms, though not yet conclusive of smallpox, where there is no one willing or able to look after them at home.

Such cases are removed as contacts or suspects, but only if consent for them to be vaccinated first is obtained. Such vaccination performed after exposure to infection at home but before exposure to infection in hospital can be relied upon, in our experience, to protect from contracting infection in hospital; but if there has been exposure to infection in the house for more than two or three days before the vaccination, then the latter may not be in time to protect, but they do not contract the infection in hospital.

During the year 61 cases were admitted as contacts or suspects, and of these 10 developed the disease and 51 did not develop it. Amongst the 61 cases there were 22 babies (under two years of age), all vaccinated before or at the time of admission, and of these 19 did not take the disease.

Infants Born in Hospital.

Two women who developed smallpox towards the end of pregnancy were confined whilst in hospital. One woman (No. 952) was taken ill on September 30th, eruption October 3rd, confined October 8th. The baby No. 952 was vaccinated October 9th (i.e., the morning after the night in which it was born). The vaccination "took" but a smallpox eruption appeared on 19th. Allowing 12 days as the minimum incubation period, it is clear that the child was infected before birth. Although the child had a rather profuse eruption it made a good recovery.

Another woman (No. 465) was taken ill on May 4th, eruption appeared on May 8th, and she was confined on May 12th. Baby was vaccinated on 13th (following morning). The vaccination "took" and this child did not develop smallpox.

Compensation to Contacts.

The practice of giving compensation to contacts for keeping away from work, at one time rather a feature of the method of dealing with smallpox in Leicester, has been largely abandoned, and is now only resorted to in exceptional cases. Minor smallpox being such a trivial disease compared with major smallpox, it is not really necessary as a rule to keep contacts away from work for more than 24 or 36 hours, and for this short period compensation is not called for.

Mode of Spread of the Disease.

After an epidemic has once become established, the source of infection in a considerable proportion of cases cannot be traced. But where it is traceable it may be classified under the following heads, the proportion under each head being approximately as follows :—

Mode of Infection.				No. of Instances.	Per Cent.
1.	House contact (living in an infected house)			233	32.5
2.	Infected from a "missed" case in the house			33	4.6
3.	Outside contact	..	..	62	8.7
4.	Infected at School	..	..	79	11.0
5.	„ Factory	..	..	94	13.1
6.	No clue	..	..	203	28.3
7.	Unclassified	..	..	13	1.8
Total				717	100.0

(The above cases were for a period including the end of 1930 and the early part of 1931.)

“ Missed ” Cases.

The number of “ missed ” cases during the particular period when those classified above occurred was not so large as earlier in the outbreak. The public know better now what minor smallpox is like, whilst the medical profession in Leicester have now had more experience of the disease than ever before.

Nevertheless, “ missed ” cases still occur, chiefly of course where no medical practitioner is consulted, and when this happens considerable spread of the disease is apt to take place, not only in the house but in school or factory.

It not infrequently happens that individuals have what they not un-naturally regard as influenza, although in reality it is smallpox, the early symptoms of the two diseases closely resembling one another. After a few days illness during which they are usually, though not always, confined to bed, the symptoms completely pass off and they return to work, and when a few (at first) insignificant pimples begin to appear they are apt to think that it is due to their “ blood being out of order ” as the result of their recent illness. It is not until the pimples become larger and more disfiguring that suspicion is aroused and a doctor is consulted, or the case is referred to the Health Office. By that time, unfortunately, the mischief has already been done, and a fortnight later secondary cases begin to appear.

Vaccination Return for 1930.

Vaccinations Registered :

Public	..	..	..	}	186
Private	..	..	..
Exemption Certificates Received	..				3,825

Births Registered :

Gross	..	..	..	4,171
Corrected	..	..	..	3,872

Six summonses were taken out for non-compliance with the Acts and convictions recorded, a fine of 7s. 6d. being imposed in each case.

SCARLET FEVER.

Cases, 423	Deaths, 2.	Case Mortality, 0.4 per cent.
Previous Year.		
Cases, 517.	Deaths, 2.	Case Mortality, 0.3 per cent.
Removed to Hospital, 219.		Proportion removed, 42 per cent.

For the second year in succession, scarlet fever was non-epidemic, although at no time was the City entirely free from it.

The special treatment with antitoxic serum, employed by the Medical Superintendent of the Isolation Hospital, continues to give good results and has cut down the duration of the stay in hospital to a very low figure.

This subject is referred to more fully in Dr. Banks's report on the Isolation Hospital (Appendix II.).

DIPHTHERIA.

Cases, 198.	Deaths, 7.	Case Mortality, 3.5 per cent.
Previous Year.		
Cases, 253.	Deaths, 13.	Case Mortality, 5.1 per cent.
Removed to hospital in 1930, 166.		
Proportion removed, 83 per cent.		

Average for previous Six Years.

Cases, 308	Deaths, 23.	Case Mortality, 7.4 per cent.
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It will be seen from the above figures that the year 1930 was a very favourable one as regards both number of cases and of deaths. The latter figure was most remarkably low, and this happy record is undoubtedly very largely due to the treatment (massive doses of antitoxin injected intravenously) employed by Dr. Banks.

Details will be found in the Isolation Hospital report.

TYPHOID (ENTERIC) FEVER.

Cases, 5.	Deaths, 1.	Admitted to Hospital, 3.
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During the past five years we have had only two deaths from typhoid fever, a striking contrast to the experience of bygone years. Typhoid fever is still a very serious disease for those unfortunate enough to contract it, but fortunately it has become so rare that it ceases to be of much importance from a statistical point of view.

In none of the five cases which occurred in 1930, could any connection be established with any previous case and no source of infection was discovered.

The one fatal case in 1930 was in a woman of 53 years.

DIARRHŒA AND ENTERITIS.

Like typhoid fever, epidemic diarrhœa, sometimes called "zymotic enteritis," has now very largely disappeared.

During 1930 the number of deaths was 33, as compared with an annual average of 41 during the previous five years.

Some of the deaths registered as due to diarrhœa or enteritis were probably not of an epidemic or true zymotic character.

MEASLES AND WHOOPING COUGH.

Measles caused four deaths and whooping cough eight. These figures are much below the average.

ZYMOTIC DISEASES AFFECTING THE CENTRAL NERVOUS SYSTEM.

Encephalitis Lethargica, or "Sleepy Sickness," as it is popularly called, owing to the pronounced drowsiness which is a prominent symptom in most cases, caused eight deaths, but the number of cases notified was only three. The explanation is that cases are frequently sent in to the Royal Infirmary prior to a diagnosis being made and so escape notification. The number of deaths was about the average of recent years.

Cerebro-Spinal Fever. This is popularly known as "spotted fever," though the appearance of an eruption is not very common with the type of case commonly met with. Eleven cases were reported. This figure is higher than for many years. Thus, the figures for the past five years have been 2, 4, 4, 4, and 8. Moreover, during the first quarter of 1931 there were 12 cases.

In view of the serious nature of the disease and of the fact that it is showing a tendency to become epidemic in certain parts of the country, the increase indicated above must necessarily be regarded with concern.

No connection was traceable between the cases during the year and they occurred in widely separated parts of the City.

Poliomyelitis. Only three cases with one death were recorded during the year.

INFLUENZA.

"Influenza" is the name given to a febrile zymotic disease with which most people are only too familiar. The symptoms vary considerably in different epidemics, and it is believed that more than one micro-organism is associated with the disease. It is the cause

of a great amount of illness, often prolonged, and directly or indirectly is responsible for a heavy toll of deaths, though the fatality varies considerably in different epidemics.

In the last report it was recorded that a serious and fatal epidemic had occurred in February and March, 1929, the worst, so far as Leicester was concerned, since the disastrous world-wide epidemic of 1918, which coincided with the final stages of the Great War. Happily, the disease was comparatively little in evidence during the year 1930, and only 25 deaths were attributed to it.

TUBERCULOSIS.

The number of fresh cases notified and deaths registered during 1930 was as follows :—

	Cases.	Deaths.
Pulmonary Tuberculosis (phthisis)	582	227
Other forms	66	44
	<hr/> 648 <hr/>	<hr/> 271 <hr/>

Calculated per 100,000 of the population, the phthisis death-rate was 92, and the tuberculosis death-rate 110 (see table 5). These are easily the lowest figures hitherto recorded, the previous lowest tuberculosis death-rate being 124 in 1928.

The tuberculosis death-rate went up markedly during the War, the average for the four war years being 179 as compared with 159 for the four years preceding the war. After the war the mortality from tuberculosis fell, and for the four years, 1919-22, the average was 143. Since then there has been a further fall, though not so great perhaps as might have been hoped. Thus, for the four years, 1923-26, the figure was 140, and for the three years, 1927-29, it was 132. The figure for 1930, as stated above was only 110, and such a big drop is therefore cause for much gratification.

To state the position in tabular form :—

Tuberculosis Death-Rate.

Four-Yearly Average.	Rate per 100,000.
1907-1910	167
1911-1914	159
War Years—	
1915-1918	179
1919-1922	143
1923-1926	140
1927-1929 (3 years only)	132
1930	110

These figures are certainly satisfactory, and they indicate that the position as regards tuberculosis is definitely improving.

Number of Cases Notified.

There has also been a substantial reduction in the number of fresh cases notified, viz., from 734 to 648. This is the smallest number for seven years as regards both pulmonary and non-pulmonary, so that it will be seen that the retrospect for the year as regards tuberculosis is a satisfactory one.

Convalescent Sanatorium at "Home Place."

The convalescent sanatorium for selected cases of pulmonary tuberculosis at Holt in Norfolk, which was opened in June, 1929, has now been in operation for two years, and continues to prove a great boon to the fortunate patients who go there.

As the origin of this institution was rather unique it may be mentioned that it was the result of a prolonged and most persevering effort on the part of a voluntary body—the Health Week Committee—under the chairmanship of Ald. W. E. Wilford, which raised a substantial fund wherewith the institution was purchased and equipped and handed over to the Corporation for the use of patients who had passed through the Groby Road Sanatorium. The Ministry of Health agreed that if the capital charges were met by voluntary subscription the cost of maintenance might be defrayed out of the rates as part of the general cost of treating tuberculosis.

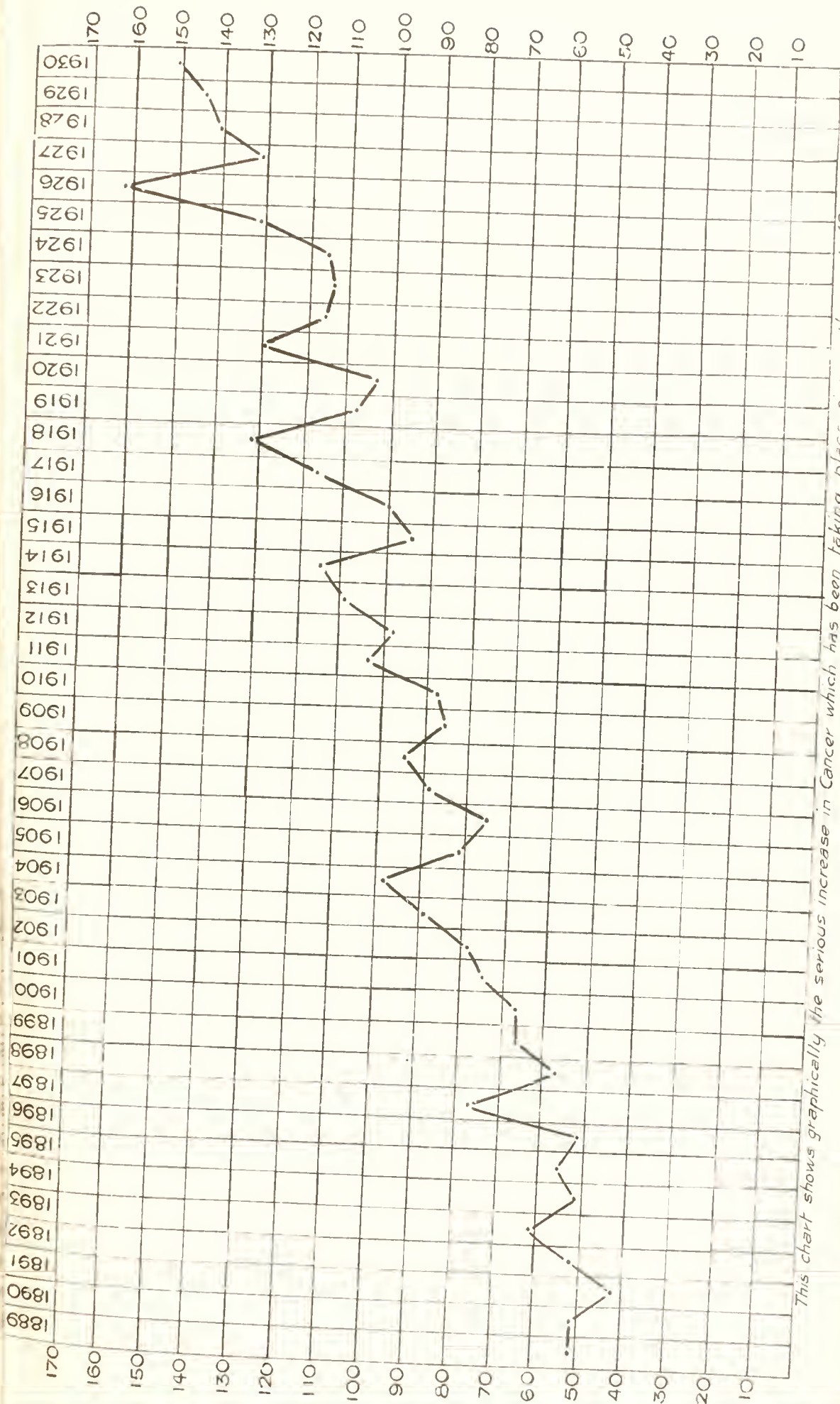
"Home Place" was originally a large private mansion, standing in its own extensive grounds, on a sandy subsoil about two miles from the sea. It was very easily adapted for the purpose of a sanatorium and provides accommodation for 26 patients and the necessary staff. It is used alternatively for male and female patients.

[Further and fuller particulars in regard to tuberculosis will be found in the reports of the Tuberculosis Officer (Dr. Thomson) and of the Medical Superintendent of the Sanatorium (Dr. Banks) in Appendices I. and II.]

CANCER.

The deaths from cancer (including in that term all forms of malignant disease) numbered 372, of which 162 were in males and 210 in females. This is 15 more than in the previous year, and with the exception of one year, 1926, is the highest figure hitherto recorded. The accompanying graph (No. 2) shows the position at a glance. After the high figure of 1926, the number of deaths for 1927 showed a welcome drop, but in the three years since then the

CANCER DEATH RATES IN LEICESTER 1889-1930



This chart shows graphically the serious increase in Cancer which has been taking place during the past 42 years

figures have been climbing up again, so that it is too much to hope that the maximum has really been reached. The statistics for previous years, since 1903, will be found in Table 14, whilst in Table 15 will be found the deaths for the year under review classified according to age, sex, and part of the body affected. As is usually the case, deaths in females exceed those in males; the age chiefly affected being over 60 years, whilst very few deaths occur below the age of 40. The parts of the body chiefly attacked are the organs associated with alimentation, especially the stomach and intestines.

It is unfortunate that the parts of the body just referred to are the least easily accessible for treatment, either by operation or by radiation. Also it is less easy in the case of internal organs to recognise the nature of the disease whilst still in an early stage than is the case with cancer of such accessible parts as the breast, skin, lip, tongue or uterus. For this reason, in spite of recent advances in the treatment of cancer, a great deal further progress will have to be made before any substantial effect upon the gross mortality from cancer is to be expected as the result of treatment.

What is really needed of course is the knowledge which will enable us to **prevent** cancer, and in view of the great difference in the incidence of cancer in different countries and amongst different races—not only as regards total mortality but as regards variety of cancer and part of the body attacked—it does not seem unreasonable to hope that further light upon the nature and etiology of cancer will enable us so to regulate our lives and habits that this dread scourge may be avoided.

Whoever makes the discovery which will enable humanity to attain this object will be one of the greatest benefactors the world has ever known.

CANCER CONTROL CLINIC.

The Leicester Cancer Control Clinic is now in the fourth year of its existence. As it is a pioneer institution, being almost the only one of the kind in this country, it will be well to repeat here what has been said in previous reports.

It was established by the Health Committee of the Corporation in July, 1927, and is held once a week,* on Tuesday evenings at 6.30 p.m., at the Health Offices in Grey Friars.

*Owing to the small number of cases, the doctors only attend every other week, but the nurse is there every week and names and particulars are taken and patients are encouraged to come again, if necessary, the following week.

Arrangements have been made with the six honorary surgeons on the staff of the Royal Infirmary who take it in turns to attend. The primary object of the Clinic is to facilitate early diagnosis, it being now clearly established and recognised that treatment, to be of much avail, must be carried out whilst the disease is still in a comparatively early stage. The Clinic is intended, therefore, for consultation only, not for treatment. Cases coming for advice are examined, and in many cases the patients are sent away reassured that there is no evidence of cancer. On the other hand, cases in which cancer is diagnosed are advised in various ways, e.g.,

- (1) Recommended to the Royal Infirmary for admission for operation.
- (2) Recommended to go to a private hospital or nursing home.
- (3) Referred back to their own medical attendant.

Cases which are suspected as being possibly cancer, but in which the diagnosis cannot be definitely made at the first visit, are either referred to the Royal Infirmary for fuller and more complete examination than is possible at the Clinic, or they are asked to come again to the Clinic after an interval ; alternatively, they are referred to their own doctor to be kept under observation.

The closest possible co-operation exists between the Clinic and the Royal Infirmary, and the authorities of the latter institution give preference in the matter of admission to cases referred to them from the Clinic.

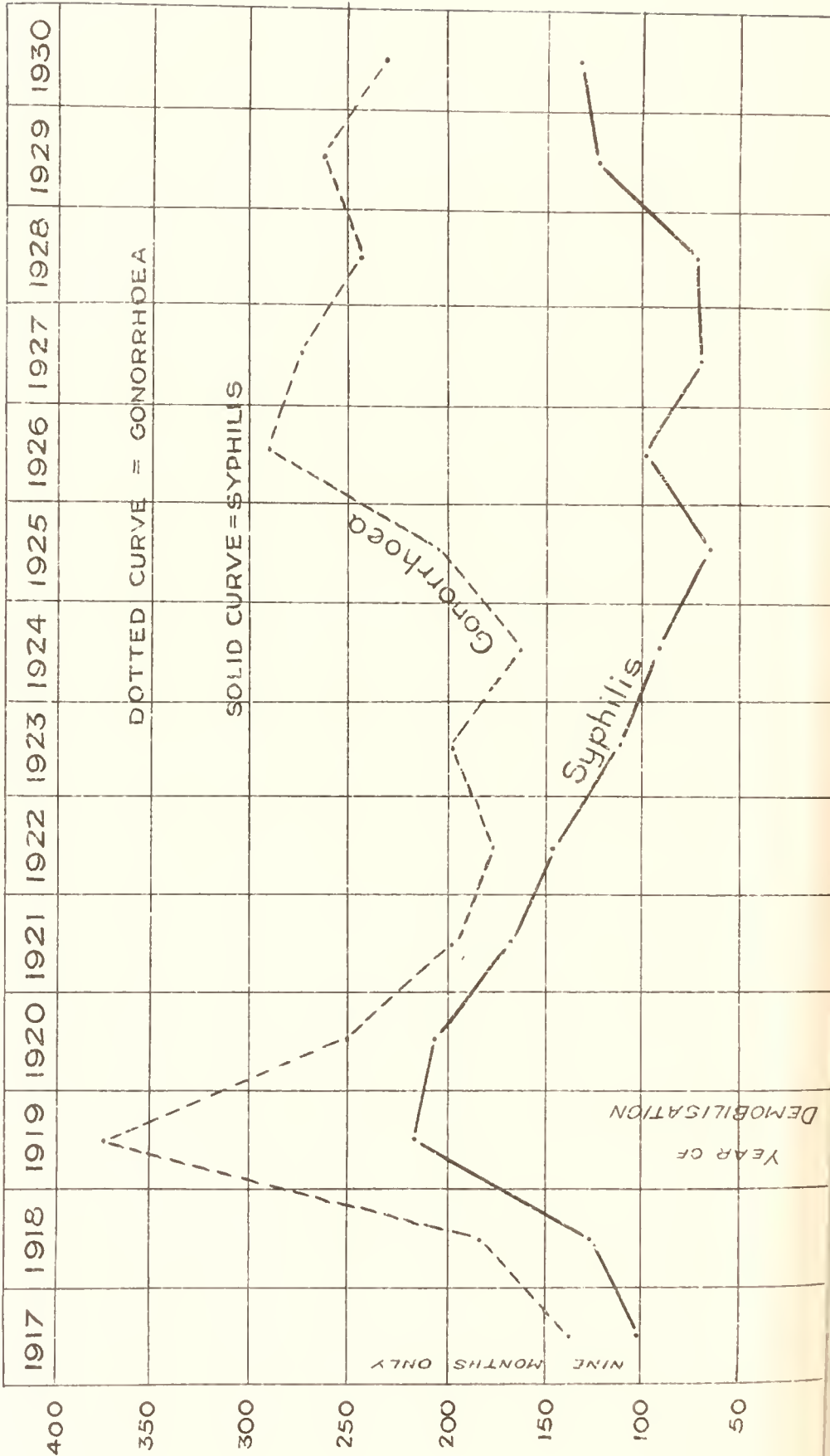
Amongst the advantages offered by the Clinic over the out-patient department of a general hospital, is the individual care and attention which, owing to the small number of cases, it is possible to give to every case. There is also the absence of the crowded waiting hall and long hours of waiting so often associated with out-patient departments. The patients at a cancer clinic obtain the advantages of private patients consulting the best experts the City possesses, though as the Clinic is quite free no question of expense stands in the way.

The one drawback in connection with the Clinic is that the public do not take as much advantage of it as it was hoped they would do. Possibly the dread which most people feel in regard to cancer may account for this.

During the year under review the number of new patients applying was only 52, and as the number of Clinic Sessions was 30, this works out at an average of less than two new cases per session.

VENEREAL DISEASES
NEW CASES IN MALES (CITY ONLY)

Royal Infirmary Clinic
1917 - 1930.

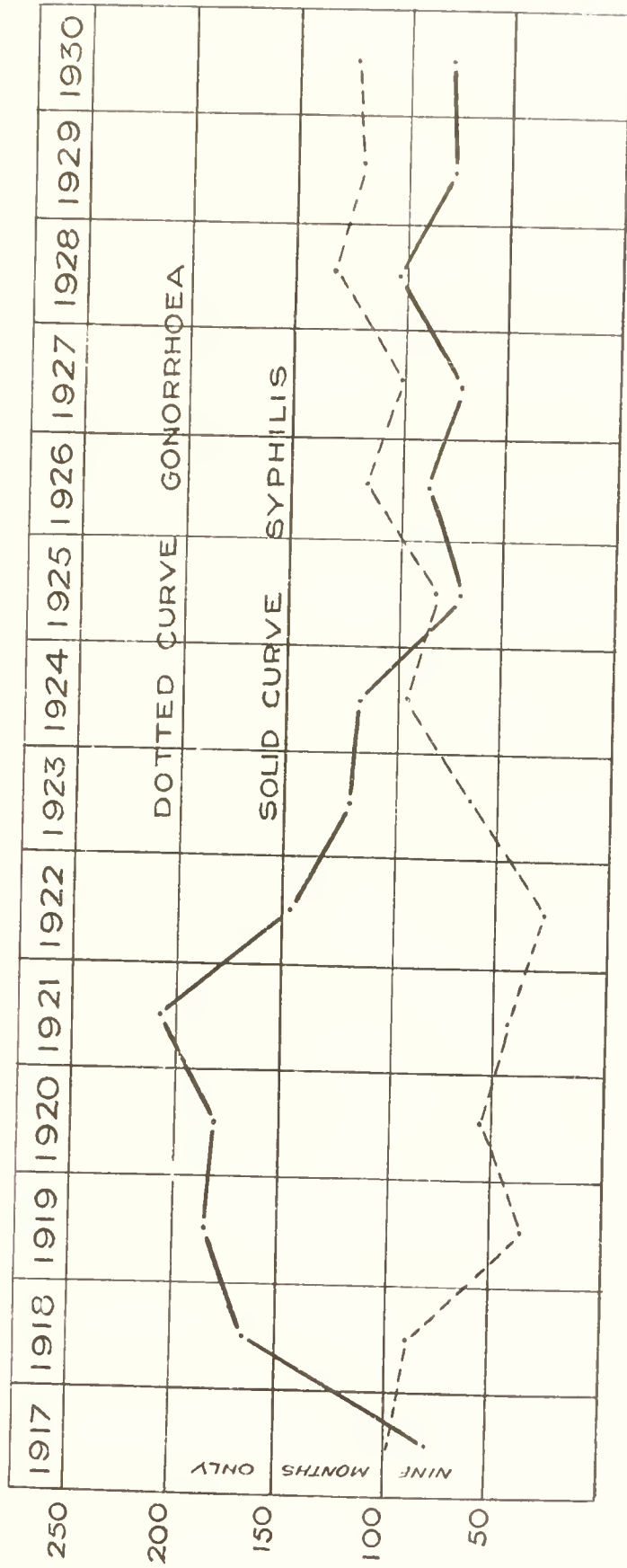


VENEREAL DISEASES

NEW CASES IN FEMALES (CITY ONLY)

Royal Infirmary Clinic

1917 - 1930



The curves for Venereal Diseases in Females are very different from those in Males. The number shown as new cases is only the number coming forward for treatment and not the number actually occurring of which we have no official record. The apparent increase since 1925 can partly be accounted for by a difference in classification

These figures are disappointingly small. It would seem as if the public has such a dread of this disease that the very name of the Clinic frightens them away. The question of some other name was carefully considered at the outset, but if the real object of the Clinic was camouflaged, the public would not know what it was for.

Apart from facilitating early diagnosis and providing facilities for treatment, there seems very little in the present state of knowledge which can be done by local authorities to check the ravages of this terrible scourge, which to-day is undoubtedly the worst enemy, in the realm of disease, threatening civilised races.

VENEREAL DISEASE.

Full particulars of the work done in connection with the treatment of venereal disease will be found in the reports of Major H. J. Blakesley, F.R.C.S., and Dr. Bessie Symington, the Medical Officers in Charge of the male and female V.D. Clinics (Appendix V.) ; whilst the statistics for 1930 and for previous years will be found in tables 12, 12*a*, and 13. The accompanying graphs Nos. III. and IV. show the position at a glance.

It is satisfactory to learn from Major Blakesley's report that the serious increase in primary syphilis in males reported by him last year as occurring in 1929 shows some decline and that the virulence and complications were less severe. At the same time the situation is bad enough, the total number of new cases in males (which number includes cases in all stages of the disease and not merely cases in the first or primary stage) coming to the Clinic during the year shows an increase, the figure being 134 as against 125, 71, 70, 99 and 66 in the previous five years (Table 13). On the other hand, gonorrhœa in males shows a slight decrease ; whilst in females the figures for both diseases remain about stationary.

PREVENTION OF VENEREAL DISEASE.

Of all " preventable " diseases, venereal diseases are, from one point of view, the most preventable. Apart from the transmission from parents to children, or from husband to wife and *vice versa*, and from those rare cases where the disease is contracted apart from sex intercourse, the disease is always transmitted through the promiscuous or illicit relationship of the sexes. If this could be abolished, venereal disease would undoubtedly disappear. Such a result would be of incalculable benefit to the health and well-being of the race, for venereal diseases are amongst the most

disastrous to health of all diseases. But, unfortunately, it is a very big "if." The sex urge is one of the strongest known to man, and, human nature being what it is, it is Utopian to expect that "immorality" will ever be abolished. This is no reason, however, why it should not be diminished and with it the incidence of venereal disease.

Men and women may be divided into three classes.

1. Those who can be depended upon to "keep straight" as the result of good up-bringing and home training, or of innate rectitude of character.

2. Those who from weakness of character or otherwise will probably resort to illicit sex gratification, no matter what they are taught or told, provided the opportunity occurs.

3. An intermediate class whose fate is in the balance. Given good advice and a knowledge of the disastrous effects in the way of permanent injury to health, which may result from promiscuous intercourse, this class may be influenced so as to avoid these dangers.

The question then is, how can we reach this class with the necessary instruction so as to fore-warn them of the danger of venereal disease?

The answer surely is by suitable ante-V.D. propaganda. Ordinary lectures are of comparatively little use as the people one wants to reach do not attend such lectures. Notices in public conveniences have the advantage of reaching a wide public, but the information which can be conveyed through such notices is necessarily very limited in scope. Still this is a method which we have largely depended upon in Leicester. Then there are advertisements in the press, and the public showing of approved ante-V.D. propaganda films, several of which are available.

This latter method, in the opinion of the writer, is one of the best, provided suitable films are chosen. Experience proves that the public one wishes to reach will attend the showing of such films. It is some years now since this method was employed in Leicester.

There is yet another method of combating V.D. which has been much more widely resorted to in certain continental countries than in this. This method, which is advocated by the Society for the Prevention of Venereal Disease, is based on the belief that we shall never be able to abolish promiscuity and that it is better to recognise this and to teach the individual how he can safeguard himself against the risk of infection when indulging in promiscuous relations.

There are, however, two serious objections to this line of action. The first is the ethical objection which cannot be ignored or brushed aside.

The other is the consideration that whilst the immediate effect might be beneficial so far as the prevention of disease is concerned, the ultimate result might be just the reverse, if—as might well be the case—it had the effect of encouraging promiscuity, because no methods of “prevention” (i.e., safeguarding against infection) are entirely reliable. They are apt to break down when most required, and for this reason, if for no other, the writer is unable to feel much enthusiasm for the methods advocated by the Society referred to.

ALCOHOLISM—THE ABUSE OF ALCOHOL.

“Every Medical Officer of Health in reviewing the causes of deaths and ill-health ought to refer, in unequivocal language, to the damage to health wrought by alcohol.”

It is cause for thankfulness that this nation is certainly less addicted to insobriety than was at one time the case. Drunkenness is now universally condemned by public opinion as something disgraceful, and the sight of an intoxicated man or woman is happily much less common than it used to be.

But very serious injury to health may be caused by indulgence in alcohol which, although excessive, may yet never result in actual intoxication. Indeed, it is generally agreed that “little and often” may be far more dangerous, so far as injury to health is concerned, than occasional outbursts which result in becoming “gloriously drunk.”

It is quite impossible to gauge the exact amount of damage done to the health of a community by indulgence in alcohol from the actual number of deaths certified as due to “alcoholism.” Alcohol is an indirect, rather than direct cause of death. It undermines the constitution. It brings about an unhealthy condition of certain vital organs, notably the stomach and liver. It reduces the natural powers of resistance and paves the way for other diseases. The life of a man or woman “addicted to drink” can never be a really “good” life, and will usually be shorter than would otherwise have been the case.

The Registrar-General, in his statistical review for 1929, gives some important figures including tables and a diagram. He points

out that during the period, 1900 to 1929, the deaths from alcoholism and delirium tremens had fallen from 113 to 21 per million, the deaths from cirrhosis of the liver from 144 to 38 ; deaths from overlying from 2.03 to 0.57.

During the same period the number of gallons of potable spirits retained for home consumption in the U.K. had fallen from 45,889,000 to 12,633,000 (figure for 1928).

The Registrar-General draws from these figures the obvious inference, which is supported by the diagram, that there is a definite relationship between the deaths from the causes specified and the amount of alcoholic spirits consumed.

He writes :—“ The diagram shows that during the final quarter of the nineteenth century mortality from alcoholism, whether gauged by deaths ascribed to “ alcoholism and delirium tremens,” to cirrhosis of the liver, or by infantile deaths from suffocation in bed by their (presumably often drunken) parents, was rising to reach a maximum at or about the end of the century, generally in the year 1900, and that since then all these rates have tended to fall ”

“ The diagram provides a ready explanation of this harmony of mortality increase up to 1900 by showing a corresponding maximum in that year for spirits consumed. After this the course of the fall in consumption is very faithfully followed by those of all the mortality indices used ”

“ During the half-century covered, the diagram brings out a very close correspondence between the consumption of alcohol and the mortality attributed to it, which is especially noticeable in regard to the abrupt changes in consumption during the war . . ”

It must be conceded of course that the damage to health caused by alcohol is due to the use of alcohol **in excess**. But the question : What constitutes excess ? is very difficult to answer. It is not merely a question of quantity. Very much depends upon the circumstances, and what may not be excess for one individual may easily be dangerous for another. This much, however, may be said, viz. :—that the “ danger point ” is often much nearer than many “ moderate drinkers ” imagine ; and that many an individual who confidently believes that he himself is well within the bounds of strict moderation is really taking much more than is good for him.

SCABIES (ITCH).

A bathing and treatment centre for this contagious and very unpleasant affection is provided at the Health Department. Fortunately the affection is not nearly so common as it was some years ago when the centre was started after demobilisation after the war, and last year the number of cases dealt with was only 29 as against 38 in the previous year.

Of these 29, 25 were in children, and 4 in adults.

In most cases the affection is very amenable to treatment, but in some cases many visits have to be made before a cure is effected.

PART III.

Administrative and General.

HOUSING OF THE WORKING CLASSES.

The task before the country to-day is not so much the building of houses to meet the acute shortage which existed a few years ago. Although a shortage still exists the situation has certainly changed for the better, both as regards the need for houses and the capacity of local enterprise to meet it. The great task is now the provision of houses to enable the problem of the slums to be dealt with on a comprehensive scale. The problem of the slums is the crying need to-day. An attempt is made below to adumbrate what the problem of the slums—at any rate so far as Leicester is concerned—really is.

The following table shows the number of new houses which have been erected in Leicester during the past ten years by private enterprise and by the Corporation. The figures include houses erected by the Corporation outside the City boundary.

Number of Houses Erected.*					
		By Private Enterprise, Without Subsidy.	With Subsidy.	By Housing Committee.	Total.
1921	..	21	87	392	500
1922	..	114	—	260	374
1923	..	135	—	84	219
1924	..	336	70	114	520
1925	..	298	239	513	1050
1926	..	374	303	1036	1713
1927	..	726	265	1590	2581
1928	..	481	523	587	1591
1929	..	348	680	396	1424
1930	..	583	—	505	1088
Total for 10 years		3416	2167	5477	11060

N.B.—Of the 5,477 houses erected by the Corporation, 2,108 were outside the city boundary.

* Figures supplied by the City Surveyor and City Housing Architect.

The Government subsidy for houses erected by private enterprise ceased in 1929, so that all houses erected by private enterprise during 1930 have been unassisted. Although the total number of houses erected by private enterprise has, in consequence, dropped materially, the number erected without subsidy has increased and, it may be hoped, will continue to do so, as long as the need for more houses still persists.

THE PROBLEM OF THE SLUMS.

There is general agreement that the most important task before the country to-day is to deal with the problem of the slums. This is admittedly urgent. Prior to the passing of the Housing Act of 1930—the Charter of the Slum Dweller—no satisfactory solution appeared possible, and the difficulties, financial and legal, seemed well-nigh insuperable. To-day, armed with the powers given by the new Act, and encouraged by the increased financial assistance provided by the State, there seems no real reason why the problem should not be effectively tackled in real earnest.

What, then, is the “problem of the slums?” No doubt it varies in different places, but I am inclined to think, speaking as a medical officer of health, that in reality it is somewhat different from what many people would appear to imagine. I am convinced that there are two main, and quite distinct factors in the slum problem, one which has to do with “bricks and mortar,” and the other with “flesh and blood”; and of the two, the latter is the more important.

The slum problem in Leicester, as I see it, lies in the fact that there are in the poorer quarters of the City numerous families living under conditions as regards housing accommodation which are detrimental to their health and well-being, both moral and physical. Accommodation which, in some cases, might be reasonably adequate, if put into proper repair, for, say, an elderly couple without children, may be hopelessly inadequate and dangerous to health if occupied by six or eight or more persons. It is not merely a question of cubic space and sleeping accommodation, but of amenities such as facilities for washing, cooking, storing food, w.c. accommodation, &c. In other words, **it is very largely a question of overcrowding.** The relief of overcrowding is in my opinion very largely the key to the solution of the problem. No doubt very many houses need putting into thorough repair, whilst here and there there are houses or blocks of houses and in some cases whole courts and alleys, which are so old and worn out, or so badly designed, or so congested, that they are probably not worth repairing and would be

better demolished. There are, however, few extensive areas in Leicester so bad that they need to be entirely demolished as clearance areas.

The wholesale demolition of houses is not only a very costly procedure, but—and this is most important—it will not in itself solve the slum problem. It only attacks one aspect of the problem—the “bricks and mortar” aspect. The true solution of the slum problem, as the writer sees it, **lies in the re-housing under decent conditions of those families who at present are suffering from inadequate housing.** I am well aware that this raises important economic and social questions. In other words we are up against the “flesh and blood” aspect. Very often the people most in need of better houses—poor persons with large dependent families—are not able to afford the standard rent of a decent house. The Housing Act of 1930 definitely recognises this difficulty and specially provides for it by arranging for differential renting. Again, the class of people we are considering are not always just those whom landlords, municipal or private, would voluntarily choose as tenants to put into a decent house. It is here that we have to remember that the “flesh and blood” side of this problem is so infinitely more important than the “bricks and mortar” side. Houses should be made for man and not man for the houses. If we really want to solve the slum problem we must be prepared to put the interest of human beings before the interests of our houses, and we must not be too particular about the character of the tenants we attempt to help. We must remember that “those that are whole need not the physician but those that are sick,” and far more good may be done by taking a “sick” family (consisting perhaps of rather tactless parents and a large number of children) out of the slums, placing them in a good house in good environment, and helping them to make good by restoring their self-respect, even though we have to temporarily grant them a rent-rebate to suit their means, than by giving the same house to a highly respectable young couple without children who can be depended upon to pay the full standard rent, but who would never under any circumstances be likely to become real slum dwellers.

The Selection of Tenants for Municipal Houses.

Housing Committees throughout the country have accomplished a great work in building, in the space of ten years, and in the face of very great difficulties, over half-a-million new houses. Moreover, they have succeeded in greatly raising the standard for new working-class houses.

Speaking generally, the houses erected have been excellent, and much in advance of the pre-war standard. Having built such good houses it was, perhaps, only natural that they should wish good tenants to occupy them, and in making the selection from the large number of applications, they have naturally paid attention to the character of the prospective tenant with this end in view. A "good" tenant, from a landlord's point of view, is one who can be trusted to take good care of a house, to maintain the character of the neighbourhood for respectability and, above all, to pay his rent regularly.

The serious criticism has been raised, however, that there has been a tendency for municipal houses, up and down the country, to get into the hands of persons considerably above the class who constitute the problem of the slums, whose average family is small, and who, when all is said and done, are not the class most in need of better housing from the point of view of public health.

Prior to the passing of the 1930 Housing Act, this tendency was to some extent unavoidable. The people most in need of better housing—poor people with large families of children—too often could not afford to pay the standard rent fixed for municipal houses. Now, however, with the special provision of the new Act as regards differential renting, this difficulty need no longer be a barrier to granting municipal houses to those who most need them.

Speaking as Medical Officer of Health, I wish to insist that **housing needs rather than ability to pay** ought to be the chief criterion in deciding who should be the fortunate ones to be allocated municipal houses. Further, in deciding as to the relative urgency of housing need, I submit that the **claims of the children ought to come first every time**. It is **the children**—the rising generation—who as a class will benefit most from our new houses, and a municipal house allocated to a childless couple, is, as a rule, in my opinion, a house wasted.

Rent Rebates.

The precise method of adjusting rents is left, under the new Act, to the discretion of local authorities. I would submit that differential renting can best be applied by means of temporary rebates from the standard rent. These rebates will need to be revised periodically. Couples with large families will usually only need assistance so long as the children are dependent. As soon as children are able to work they become an asset instead of a liability—often a very important asset. This is certainly true in Leicester.

where the earnings of the children are often of more importance than those of the father.*

There is much to be said in favour of rent rebates based on the number of dependent children. They would have the great advantage that it is possible to devise a uniform system which could be made applicable to all families where children were concerned, and where need for assistance arose because of the children. Moreover, the rebates could be arranged to automatically cease as the children ceased to be dependent.

Houses for Aged Persons

A good deal has been heard about the need of special small houses for old people, whether married or single, and the Housing Act, 1930 (Sect. 46), makes provision for this by allowing a reduction in the minimum dimensions, provided the Minister is satisfied that a real need for such houses exists.

In Leicester it is very doubtful if many new houses for old people will really be necessary. From the health point of view the old people are the last section of the community who need to be disturbed, if it can be avoided. They have in most cases lived the greater part of their lives in the kind of house they now occupy. There is not usually overcrowding, as when there are big families of children and, so far as they are concerned, there is little to be gained by shifting them. The little old cottages, of which there are so many in the old parts of the City, whilst most unsuitable places in which to rear families of children, are not amiss if put into reasonable repair, as houses for elderly people. The very congestion of buildings, and smallness of the rooms, which is so bad in the case of children, may even make them more cosy and sheltered in the case of the old, whilst the shortage of w.c. accommodation, which is such a crying evil where there are large families would hardly be felt if the houses were occupied by couples without children.

Certainly, in Leicester, if the powers now available under the new Housing Act for relieving overcrowding be exercised to the full, and all large families were rehoused in the outskirts of the City, there would be made available a large number of little old low-rented cottages which, if put into proper and reasonable repair, would make quite suitable homes for old people to end their days in. I am not at all sure that these old people would not be happier and

* I recently came across a case where a girl working in a factory, and not yet fifteen years old, brought home every week, as I was assured by her mother, not less than 20/-, and sometimes several shillings above this sum.

live longer if allowed to remain in the type of house and surroundings to which they have grown accustomed through a lifetime, than if up-rooted—usually much against their will—and replanted in brand-new houses of a more up-to-date type but a long way off from their old haunts.

Moreover, it has to be recognised that the little house for the small family costs **distinctly more to build per person**, and would entail a higher charge on the rates **per person rehoused**, than the large house required for rehousing a large family.

In view of these considerations, I submit that the policy of building special small houses for old people in a city like Leicester needs very careful consideration before it is adopted on any large scale.

Once again I would insist it is the **children**, rather than the aged, who should be our first concern in tackling the problem of the slums.

Let our slogan be, "Save the children from the slums!" to which we may add, "Keep the old houses for the old people."

THE HOUSING ACT, 1930.

The most important event of the year under review, so far as the future policy of the country in regard to municipal housing is concerned, was undoubtedly the passing of the Housing Act of 1930, sometimes referred to as the "Greenwood" Act, to distinguish it from the Act of 1924, or the "Wheatley" Act. This Act was only agreed to after very careful consideration on the part of various representative bodies, and it must be regarded as a sincere attempt to meet and overcome various difficulties experienced by local authorities in attempting to solve the slum problem. It might well have been called a "Slum Abolition" Act rather than a "Housing" Act. It goes so far in the direction of making it possible to provide municipal houses for those most needing them, viz.: the overcrowded poor families living in the slums, that it may well be regarded as the "Slum Dwellers' Charter."

One of the most notable features of the Act is the provision for dealing with the slums by means of entirely new procedure—"Improvement Area" procedure, as distinct from "Clearance Area" procedure.

The new procedure is described as follows:—

"Where a local authority . . . are satisfied as respects any area in their district that the housing conditions in that area are

dangerous or injurious to the health of the inhabitants by reason of the disrepair or sanitary defects of dwelling houses therein, and also by reason either of overcrowding in the area or of the bad arrangement of the houses or of the narrowness or bad arrangement of the streets, and that those conditions can be effectively remedied, without the demolition of all the buildings in the area by—

- (i) the demolition or repair, as the circumstances may require, of those dwelling houses which are unfit for habitation ;
- (ii) The purchase of any land for opening out the area ;
- (iii) the abatement of overcrowding in the area ; the authority may pass a resolution declaring the area to be an improvement area.”

Before passing such a resolution the authority must satisfy the Minister of Health that the size of the area is such that the housing conditions therein can be effectively remedied within a reasonable period, and that suitable accommodation for persons of the working class who will be displaced will be provided in advance of requirements.

Having passed the necessary resolution, notice of it has to be published in the local papers, naming a place where a map of the area can be seen. Further, a copy of the resolution has to be transmitted to the Minister, together with an estimate of the number of persons who will be displaced.

Having passed the necessary resolution declaring an area to be an improvement area the authority shall, as soon as may be—

- (i) serve notices on the owners in the cases of all unfit houses requiring the execution of all necessary work to render the houses fit, or, alternatively, the demolition thereof ;
- (ii) proceed to purchase any land required for the opening out of the area, unless satisfied that the owners will themselves undertake such opening out ; and
- (iii) make and enforce special bye-laws for preventing and abating overcrowding, and generally for securing the improvement of the housing conditions and the subsequent maintenance of a proper standard.

Improvement Area procedure would seem to be specially appropriate to a city such as Leicester, where the slums are

admittedly "grey" rather than "black," and where there are large areas not bad enough to be dealt with as Clearance Areas, but which are certainly capable of great improvement.

There are no real "plague spots" in Leicester to be swept away at any cost.

This new form of procedure for dealing with the slums, authorised for the first time in the 1930 Act, has certain very definite and real advantages over clearance area procedure, which entails the demolition of all the houses in an area—apart from any "islands" which may be left.

These advantages of "improvement area" procedure over "clearance area" procedure may be enumerated as follows :—

(a) It only requires the demolition of the worst houses which are really beyond repair, together with any obstructive houses which may need to be removed for the purpose of opening out an area.

(b) It enables houses which are capable of repair to be preserved. There are very many old houses in Leicester which if put into reasonable repair would have many years of useful life and would serve well for the housing of old people or couples without families.

(c) It would only necessitate the displacement of a portion of the population of a given area.

(d) It would enable much larger areas to be dealt with in a given time.

(e) It provides special facilities for the relief of overcrowding due to large families, as the Government Subsidy (based on number of persons) is available apart from the demolition of houses. This subsidy is not available for relief of overcrowding except in an improvement area.

(f) The power to make special bye-laws (e.g., regulating the number of persons per house), should make it practicable to effectively prevent overcrowding, once abated, from recurring. This would be a great step forward.

(g) It would meet with much less opposition from property owners, whose chief complaint against clearance area procedure is that a certain proportion of houses, which are not really beyond repair, are condemned and have to be demolished, and the compensation granted is site value only; nothing being allowed for buildings, although these may have a substantial value.

(h) Lastly, improvement area procedure would entail a far smaller expenditure of public money for a given area. This is a vitally important consideration if real progress is to be made with the task of clearing up the slums.

Exchequer Assistance.

Another outstanding feature of the new Act is the new basis on which the Exchequer assistance is given, viz.: a given sum (45s.) per person displaced for whom new housing accommodation is made available. The amount of the grant once fixed is payable annually for 40 years. This grant takes the place of the old grant of 50 per cent. of the estimated average annual loss incurred by a local authority in carrying out a slum clearance scheme.

As a condition of receiving the new grant local authorities must undertake that certain special conditions are observed. Thus, as regards rents, special provision is made for **differential renting**, so that houses may be brought within the reach of the very poor. Authorities are empowered to grant **rebates** off the standard rent, subject to such terms and conditions as they think fit, but the total rents charged for all houses provided under the Act must not exceed a certain amount fixed according to a particular formula. The precise method of differentiating between rents is left to the discretion of local authorities.

This new "unit" basis of fixing the Government grant is specially designed to encourage local authorities to deal with overcrowding in the slums, and in particular with the large family—the larger the family rehoused the larger the Government grant.

Green Street–Sandacre Street Slum Clearance Area.

This scheme, described in detail in the Annual Report for 1928, was first brought forward under the Housing Act, 1925, and a resolution approving the scheme was passed by the City Council on 26th February, 1929.

Unfortunately, the uncertainty created by the legal decision in the "Derby Case," and the prospect of a new Housing Act, held up the scheme for over a year. With the coming into force of the 1930 Housing Act, the scheme was again brought forward as a clearance area under the new Act, and the Council again confirmed the scheme on October 28th, 1930. At the time of going to press the scheme has again been before the Council, the necessary resolutions have been passed, and the scheme is now ready to be sent to the Ministry of Health.

The Housing Committee have prepared a scheme for providing the necessary houses for re-housing the displaced tenants, the contracts for these houses have been placed, and there is good reason to believe that the scheme will now go rapidly forward.

The Green Street-Sandacre Street area is undoubtedly one of the worst—probably the worst—slum area in the City, and in this case clearance area procedure seems clearly to be indicated.

LOCAL GOVERNMENT ACT, 1929.

We have now had twelve months' experience of the working of the Local Government Act, 1929, the most revolutionary and far-reaching piece of legislation affecting local government that the present generation has ever seen or is likely to see.

In Leicester the City Council decided, in preparing their "Scheme," to make a full "declaration" under the Act, the only exception being as regards the care of the blind, who in Leicester are exceptionally well looked after by voluntary agencies. A further exception has been made, since the Scheme was approved, in regard to destitute children of school age, these being left with the Public Assistance Committee instead of, as was originally intended, being handed over to the Education Committee. Moreover, the Maternity and Child Welfare Committee have not, up to the present, taken charge of the children below school age, though no final decision under this head has yet been arrived at. The really important thing, of course, is that the children should be properly cared for and brought up under good conditions apart from associations which might prejudice their future. If this is effected it does not really matter which Committee of the City Council carries out the work.

City General Hospital.

From the point of view of the Health Committee the most important change resulting from the Local Government Act has been the "appropriation" of the North Evington Poor Law Infirmary as a public health hospital. This has been re-christened "The City General Hospital," and is controlled by the Health Committee through a special sub-committee, which meets at the Institution once a month (third Wednesday).

It was decided that it would be wiser not to make any very drastic changes in the administration of the institution at the outset, but to find out first, as the result of experience, just what changes

seemed called for. This policy was no doubt a wise one, provided it is realised that some changes, which will doubtless entail some additional expense, will certainly be called for if the ideal of transforming the institution from a poor law infirmary into a first-class general hospital is to be achieved.

It is true, of course, that the institution has got to serve the needs of the "destitute" sick, but that word "destitute" has now come to have a technical meaning, and the number of really destitute persons, using the term in its ordinary sense, amongst those admitted to the institution is comparatively small.

There is, however, a much larger class—sometimes referred to as "the old chronics,"—elderly persons in poor health, who are not acutely ill, but most of whom, owing to advancing years, are not likely ever to be restored to good health or working capacity again. Many of these cases remain in the institution for long periods, sometimes for years, and the question has still to be settled whether it is better that they should occupy beds at the City General Hospital or in some other institution. Undoubtedly, the presence of cases of the class we have referred to must tend to interfere with the character and work of the institution regarded as a first-class general hospital.

An important step has already been taken in transferring mental and mentally deficient cases to the institutions at Humberstone and Leicester Frith specially designed for such cases.

MATERNITY AND CHILD WELFARE.

The important and varied activities now carried on in the interest of motherhood and childhood, under the somewhat cumbersome title of "Maternity and Child Welfare Work," had their beginning, in the case of Leicester, at the end of last century with the appointment of a "woman sanitary inspector." Few indeed could have foreseen in those days the extent to which that first early experiment would grow in little more than a generation. The one "woman sanitary inspector" became two. Then their name was changed to "Health Visitors." An Infants' Milk Depot was started. "Infant Welfare Centres" and "Schools for Mothers" or "Babies' Welcomes," began to be established, at first under voluntary auspices (the Leicester Health Society), afterwards with the financial and other assistance of the Health Committee. The work grew and prospered and in 1914 the Government gave a great impetus to the work all over the country by agreeing to pay 50 per cent. of all approved expenditure. A Municipal Maternity Home

was established, to supplement the work of the voluntary Maternity Hospital, started some years before. Day Nurseries, at first established by voluntary effort, were taken over by the Corporation. After a time the Corporation took over all the infant welfare centres. More and more centres were started until to-day there are 16 of them in various parts of the City. At each centre infant clinics are held, each attended by a medical practitioner.

Ante-natal clinics were also established for the benefit of expectant mothers, and the last addition to the work has been a birth control clinic.

The work has become so extended and so important that for some years a whole section of the Annual Report has been devoted to it. Last year this part of the report was contributed at my request by Dr. Humphreys, the M. & C. W. Medical Officer, who has charge of this branch of the work. This year I have thought it better, and more in keeping with the general plan of this report, to include the M. & C.W. Report by Dr. Humphreys as a separate appendix (No. IV.). It can hardly be disputed that the importance and magnitude of the work justifies this course.

BIRTH CONTROL CLINIC.

In the last Annual Report it was recorded that the Health Committee had passed a resolution authorising their medical officers to give birth control information to married persons desiring it, but that this resolution had not (at the time of writing) been confirmed by the City Council. It can now be recorded that in due course the matter came before the City Council and (as was to be expected in view of the controversial nature of the subject) resulted in a full and animated debate. In the event, a resolution was passed that it was desirable that a birth control clinic should be provided.

Following the passing of this resolution, your Medical Officer of Health and M. & C.W. Medical Officer visited several existing birth control clinics in London, Birmingham and Nottingham in order to become familiar with the most recent practice and methods. Subsequently a report was presented to the Health Committee and a scheme for establishing a clinic was approved. Some little delay ensued pending structural alterations and redecoration to new premises at which the clinic was to be held, so that although at the time of writing the Leicester Birth Control Clinic is now in operation it was not opened during the year under review and therefore no report as to the actual working is called for. It may, however,

be explained that in order to comply with the conditions laid down by the Ministry of Health, the clinic must be limited

- (a) to women who are married ;
- (b) to women attending at M. & C.W. Centres ;
- (c) to women who require advice on health grounds.

It is difficult to understand why advice should be restricted to women who are attending a M. & C.W. Centre. Probably only a minority of women attend a M. & C.W. Centre, and some women although otherwise suitable, and indeed in urgent need of advice—e.g., women suffering or recovering from tuberculosis or other serious constitutional disease—may not be qualified to attend a centre as they may be neither mothers, nor expectant mothers. Although the condition of their health may make it eminently desirable that they should not become pregnant, the present ruling of the Ministry of Health would debar them from receiving the advice on the matter of contraception which they so urgently need from the Birth Control Clinic specially designed for their benefit.

NEW ORTHOPÆDIC AND LIGHT DEPARTMENT.

An important new step forward in connection with social service was made during the year, by the opening of an Orthopaedic and Light Department at Richmond House. Although the new centre has been provided by the Education Committee and is administered as part of the School Medical Services under the Chief School Medical Officer, it is equally available for patients sent by the Health Department and the cost is to be shared by the Education and Health Committees on the basis of user. It is, therefore, a joint arrangement.

The following particulars are from the Annual Report of the Chief School Medical Officer, from sections contributed by Dr. T. A. Carson, and Mr. Leslie Morris, F.R.C.S., respectively.

“Artificial Sunlight” Clinic.

Two 30 amp. carbon arc lamps are used. . . . The children are seated at a distance of 40 inches from the flame. Generally about eight children are treated together. Only bathing pants are worn and at the end of each treatment a tepid bath is given. Children attend twice weekly. A three months' course is given to begin with. This is followed by an interval of three months, when a second course may be necessary. The initial dose is four minutes. This is gradually increased to a maximum of 20 minutes, back and front (i.e., 40 minutes).

Before starting treatment each child is medically examined. Height, weight and other details are recorded.

The total number of children treated up to the end of the year was 246. This included 175 school children, and 71 infants from Baby Welfare Centres.

The affections for which artificial sunlight treatment was given include anæmia, malnutrition, adenitis, general debility, delayed development, rickets, bronchitis. As the Clinic was only open for part of the year it is too soon to expect statistics as to results, but Dr. Carson is satisfied that in some cases the value of the treatment is beyond doubt.

Orthopædic Clinic.

The orthopædic work of the new department is under Mr. Leslie Morris, F.R.C.S., and the following particulars are from his report. He has been in charge since May, 1930, and since then it has been possible to examine most of the orthopædic cases on the books of the Education Authority as well as certain cases which have been referred to the Clinic from the Health Department, including Infant Welfare Centres, Tuberculosis Dispensary, and the Sanatorium, Groby Road.

The number of primary examinations made were :—

Group I.—Cases with Orthopædic deformity	
or disease	249
Group II.—Cases with Orthopædic postural	
defects	236
	<hr/>
	485
	<hr/>

There had been a Clinic for postural defects for some years prior to the opening of the new Department.

As regards Group I., 1,261 treatments were given and there were 27 operations for congenital deformities, spastic paralysis, infantile paralysis, rickets, &c.

X-Ray photography and laboratory investigations in connection with the clinic have been carried out at Groby Road with the help of Dr. Banks.

Three beds in the ward at Richmond House have been reserved for orthopædic cases requiring only a short stay in hospital. More recently, certain cases requiring prolonged treatment have been

transferred to the City General Hospital. In this connection it may be mentioned that it is hoped shortly to make definite provision for orthopædic cases at the latter Institution by devoting special wards to the purpose. This is most desirable.

Every city claiming to make proper provision as regards institutional treatment should make special provision as regards orthopædic cases. This class of case calls for highly skilled specialist service and in the past it has been sadly neglected. Undoubtedly very much can be done by appropriate treatment, if applied early enough, not only to remedy serious crippling deformities, but, which is much more important, to prevent them. Modern preventive orthopædics is indeed a branch of surgery which yields brilliant results.

SMOKE ABATEMENT.

The work of the Health Department in watching factory chimneys and taking action when called for has been continued during the year. Our staff of Sanitary Inspectors have taken pains to render themselves specially competent to advise as to best means of preventing smoke nuisance from factories, and they are always ready and willing to assist in this way when desired to do so. Legal proceedings are only authorised by the Health Committee when other means have failed or an exceptionally serious offence as regards the emission of black smoke has occurred. Even in the latter event, if satisfied that the occurrence was due to exceptional circumstances not likely to recur, proceedings are not usually taken, but the offender is cautioned.

There is no doubt, however, that the ordinary factory boiler furnace such as we have in Leicester, working under normal conditions, i.e., supplied with suitable fuel, not being unduly forced, and **properly attended to by a stoker who understands his job**, can quite well keep within the limits of black smoke emission which is allowed by our by-laws, viz. :—two minutes in the half-hour. Wherever this is exceeded some definite cause, in the direction indicated, will nearly always be found.

Smokeless Fuel.

As regards domestic chimneys, which are responsible for so large a share in the pollution of the atmosphere, it is to be feared that the position is much as it was. Much has undoubtedly been accomplished by the introduction of gas and electricity for heating and cooking in place of coal fires, but there is a limit to what can be looked for in this direction. The only real solution lies in the

substitution of a solid smokeless fuel for raw coal. To become popular this should be obtainable at the price of raw coal or even a little cheaper. Excellent smokeless fuels are already on the market and others are being experimented with. The writer has used a smokeless fuel in his own house, practically exclusively, for nearly three years and has no wish or intention of ever reverting to the use of raw coal. The only drawbacks he has found are :—

(1) Greater bulk requiring more storage space for a given weight of fuel, and larger coal hods, or more frequent filling.

(2) Slightly more ash to dispose of.

(3) Less efficiency in the case of a side-heated oven.

(4) Also, at present, it is slightly more expensive per ton for those who are accustomed to a cheap or moderately-priced coal.

On the other hand there are some very definite advantages to be set down to its credit.

(1) Definitely greater radiation efficiency in the case of open fires.

(2) Greater cleanliness in handling in the coal cellar. There is practically no coal dust.

(3) Less labour in getting the fuel from the coal cellar to the fireside, no coal hammer or breaking up being required.

As regards ease of lighting, this is at least as easy as with coal, probably rather more so. It is quite simple to light a fire using paper only without sticks or firelighter.

It is certainly to be hoped that the production of smokeless fuels will increase and in time become general. Local authorities could do a great deal to encourage their use by setting the example and using them in all municipal offices and institutions.

OPEN-AIR SCHOOL FOR LEICESTER.

An event of the first importance, from the point of view of the health of the City, was the opening, by the Education Committee in November, of the Open-Air School on the Western Park, for delicate and debilitated children.

A full description of the new school, which provides accommodation for 180 boys and girls, is given by Dr. Allan Warner in the School Medical Officer's Annual Report. Suffice it to say here that the School in its planning, construction, layout, and equipment, appears to the writer to be wholly admirable, and as something of which the City may be deservedly proud. It reflects great credit

upon the School Architect (Mr. J. O. Thompson, A.R.I.B.A.), who was responsible for the design and carrying out of the buildings, guided no doubt as to what was required by the School Medical Officer (Dr. Allan Warner), who has persistently advocated the provision of an open-air school for many years.

When the proposal to erect the new school on the site selected on the outskirts of the Western Park was first brought forward it met with some opposition on the ground that the site was unsuitable. I think that any one who may have had misgivings on this score would be entirely reassured by a visit to the school as it now is, and would admit that a more admirable site could scarcely have been found. Personally, I think that the Committee concerned were indeed fortunate in being able to secure such a fine site.

Lastly, owing to the very pleasing elevation and design of the buildings, and to the fact that the actual site whilst in the Western Park, is in a secluded corner not previously used by the public, the new school in no way detracts from the amenities of the park, but rather (judging by the interest displayed by the public) enhances them.

CREMATION.

The number of Cremations taking place at the Leicester Crematorium during 1930 was 119, compared with 124, 61 and 68 respectively in the three previous years.

The persons cremated during 1930 included four ministers of religion, two medical practitioners, two dentists, two accountants, an architect, a solicitor, a journalist, an actor-manager, an army officer ; ten manufacturers, &c., and eight public servants.

Of the 119 cremations, 34 were from the City and 85 from outside areas.

Amongst well-known local personages cremated during the year were Alec Tyler, Amy K. Bennett, Amos Hall, C. A. Moore, M.D., W. G. Viccars, Elizabeth E. Gimson, Annie E. Clephan, J.P., John C. Baum, Henry A. Stanyon, Lady Faire, Fred. W. Bennett, M.D., and H. J. Ragg.

Thirty of the cremations came from the Nottingham area. With the opening of the new municipal crematorium at Nottingham now nearly ready, this source of supply will naturally cease. Moreover, some of the cremations from other districts which now have to come to Leicester will also be diverted to Nottingham. This is of course as it should be. Advocates of cremation in Nottingham

have long been urging the provision of a crematorium for that important city.

The total number of cremations carried out at the Leicester Crematorium since it was opened in 1902 is now 968. At the time of writing (May, 1931), it has reached the one thousand mark.

As regards the progress of cremation throughout the country, there are now 20 crematoriums in Great Britain, including the one at Nottingham not yet opened. The total number of cremations in 1930 was 4,527, as compared with 4,341 in 1929, an increase of 186. Although the progress of cremation is less rapid than might have been expected and desired, the total number of cremations annually continues to increase, surely if slowly.

Sunday Demonstrations.

With a view to enabling the public to learn something at first hand about cremation, the Sunday afternoon demonstrations at Gilroes Crematorium, held several times during the summer for the past few years, were continued and were well attended. Some thousands of persons have now attended the demonstrations.

Health and Cleanliness.

Health and cleanliness have long been associated in the public mind, but it is only within recent years that a serious attempt has been made to bring home to the masses, by means of organised propaganda on a large scale, the important truth that such an association as health and cleanliness really does exist.

For five years the Health and Cleanliness Council have been steadily working away and have done a great amount of useful work, issuing very effective propaganda literature and posters, equipping special stalls at Health Exhibitions, loaning out special cinematograph films, plays, &c., all with the object of inculcating habits of cleanliness and health especially amongst school children. In this connection it is hardly necessary to say how important it is that every facility should be afforded for inculcating cleanliness by example as well as precept in the schools both day and Sunday. All lavatory, w.c. and cloak-room accommodation should be above reproach, and there should be nothing "grubby" or dingy about school premises. Clean and fresh paint and colour-wash and whiting have a psychological effect which is certainly conducive to health.

Report of the Tuberculosis Dispensary FOR 1930.

By WYVILLE S. THOMSON, M.D., D.P.H., Edin.,
Tuberculosis Medical Officer.

Premises.

From March, 1923, until February, 1930, a portion of the Health Department, Grey Friars, was used as a Tuberculosis Dispensary. The available accommodation, however, was insufficient for the purpose. More suitable and commodious premises were obtained at 59 Regent Road, to which removal was made on 11th February. This has now become the centre for dealing with all work in connection with Tuberculosis in the City. These new premises are proving thoroughly satisfactory and add greatly to the comfort of both patients and staff. Though not so centrally situated as Grey Friars, no difficulty has been experienced in getting patients to attend.

Staff.

There has been no change in the Medical Staff, the medical work having been carried on by Dr. Thomson with the half-time assistance of Dr. Lawrie.

No change during the past twelve months has taken place in the nursing staff, which consists of three fully-trained nurses, each being responsible for the visitation over one third of the City.

The clerical work is still in the capable hands of Miss Heaton, but unfortunately Miss Battle, who for the past 6½ years had acted as her assistant, developed Tuberculosis of the Spine and was removed to Sanatorium where she is still undergoing treatment. Miss Breward, who had previously been employed at the Health Department, Grey Friars, was appointed in her place.

Notification Register.

Tuberculosis being a notifiable disease, all persons suffering from it must be notified, and their names are entered in the Register. At the beginning of 1927 the Notification Register was thoroughly revised. The names of all patients who had left the district were removed, as well as those whom we could no longer regard as suffering from Tuberculosis, and only those with definite tubercular disease were retained on the Register.

The following are the figures on the Notification Register on December 31st, 1930 :—

PULMONARY			NON-PULMONARY			TOTAL CASES
Males	Females	Total	Males	Females	Total	
1,753	1,643	3,396	186	151	337	3,733

Notifications.

There has been a considerable reduction in the number of persons notified as suffering from Tuberculosis during the past year—648 as compared with 734 in 1929. The pulmonary notifications were 582 as compared with 657 in 1929, and the non-pulmonary were 66 as compared with 77 in 1929. It will be noticed that the number of notifications is apt to fluctuate considerably from year to year, the lowest figure recorded since 1918 being 602 and the highest 828.

Of the 582 pulmonary notifications 256 were reported by your Tuberculosis Officer and 12 of the 66 non-pulmonary cases.

The following table gives the number of notifications since 1918 :

1918	..	Pulmonary, 746 ; Non-pulmonary, 82 ; Total, 828
1919	..	.. 658 .. 47 .. 705
1920	..	.. 572 .. 59 .. 631
1921	..	.. 497 .. 105 .. 602
1922	..	.. 566 .. 43 .. 609
1923	..	.. 692 .. 71 .. 763
1924	..	.. 725 .. 65 .. 790
1925	..	.. 606 .. 77 .. 683
1926	..	.. 650 .. 77 .. 727
1927	..	.. 700 .. 80 .. 780
1928	..	.. 668 .. 117 .. 785
1929	..	.. 657 .. 77 .. 734
1930	..	.. 582 .. 66 .. 648

The following table gives the sex and age period of those notified during 1930 :—

Age Periods	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & up.	Total
Pulmonary												
Males ..	..	3	33	14	23	49	77	50	51	23	3	326
Females ..	..	3	19	28	25	39	68	35	25	10	3	255
Non-pulmonary												
Males ..	1	6	8	5	8	1	5	2	2	1	..	39
Females ..	2	4	6	3	3	2	5	1	1	1	..	28

Deaths.

Though notifications are apt to fluctuate very considerably from year to year, the death rate forms a much more reliable guide

- as to the improvement or otherwise in the health of a locality. Speaking generally, as the following table shows, there has been a gradual decline in the number of deaths from tuberculosis in Leicester during recent years. It is satisfactory to report that the year 1930 showed the lowest figure of deaths from tuberculosis ever recorded, viz., 271. Of this number 227 were pulmonary and 44 non-pulmonary. In 1929 the total deaths numbered 319, of which 266 were pulmonary and 53 non-pulmonary.

It is only fair to mention, however, that such a satisfactory reduction in the number of deaths from Tuberculosis during the past year may be more apparent than real. We have been in the habit of recommending tubercular families to the Housing Committee for Council houses. About 400 houses in healthy districts have been allotted to our patients, but nearly half of this number are outside the city boundary, so that when deaths occur they are regarded as county deaths and do not appear in our figures. In studying the death tables, this is a point which should not be overlooked.

The following table gives the number of deaths each year since 1918 :—

1918	..	Pulmonary, 316 ; Non-pulmonary, 82 ; Total, 398
1919	..	.. 264 .. 62 .. 326
1920	..	.. 255 .. 72 .. 327
1921	..	.. 278 .. 73 .. 351
1922	..	.. 294 .. 67 .. 361
1923	..	.. 285 .. 36 .. 321
1924	..	.. 287 .. 62 .. 349
1925	..	.. 305 .. 59 .. 364
1926	..	.. 282 .. 43 .. 325
1927	..	.. 283 .. 63 .. 346
1928	..	.. 265 .. 42 .. 307
1929	..	.. 266 .. 53 .. 319
1930	..	.. 227 .. 44 .. 271

An analysis of the pulmonary deaths which occurred during 1930 shows, in the first portion of the following tables those who had had Sanatorium treatment, the stage of the disease when first examined and the length of time elapsing between notification and death. In the second portion of the table similar information is given about those who had not had Sanatorium treatment. In the third portion details are given of those who were never examined at the Dispensary—chiefly patients in other institutions, e.g., the Mental Hospital and the City General Hospital. Included here are also those better class patients who did not desire examination at the Dispensary.

ANALYSIS OF DEATHS.

PULMONARY CASES HAVING HAD SANATORIUM TREATMENT.

Stage when first notified or first examined	Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
Stage I. T.B. - ve 24 ..	..	1	..	..	1	3	1	2	16
Stage II. T.B. - ve 19 ..	..	1	..	..	..	2	3	3	10
Stage III. T.B. - ve 3 ..	..	..	..	1	1	..	..	..	1
Stage I. T.B. + ve 23 ..	..	..	1	..	..	4	4	5	9
Stage II. T.B. + ve 37 ..	1	1	1	5	10	3	5	7	4
Stage III. T.B. + ve 12 ..	2	2	2	1	1	..	2	..	2
Total 118	3	5	4	7	13	12	15	17	42

PATIENTS NOT HAVING HAD SANATORIUM TREATMENT.

Stage when first notified or first examined.	Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
Stage I. T.B. - ve 14 ..	1	2	1	1	2	..	1	3	3
Stage II. T.B. - ve 3 ..	..	..	1	1	1	..	..	..	..
Stage III. T.B. - ve 2 ..	1	..	..	1	..	..	..	..	..
Stage I. T.B. + ve 7 ..	..	..	..	1	..	2	1	1	2
Stage II. T.B. + ve 12 ..	2	2	1	5	1	..	1	..	..
Stage III. T.B. + ve 11 ..	5	1	1	2	1	1	..	..	..
Total 49	9	5	4	11	5	3	3	4	5

PULMONARY CASES NOT EXAMINED AT OR IN CONNECTION WITH THE DISPENSARY.

TOTAL	Died within 1 month of notifica- tion.	Within 2 months	Within 3 months	Within 6 months	Within 12 months	Within 18 months	Within 2 years	Within 3 years	Lived 3 years or over
33	12	4	3	4	2	2	1	2	3

These three tables account for 198 deaths. In addition there were 28 deaths of patients who had never been notified as suffering from tuberculosis. This gives the total of 227 pulmonary deaths.

As regards the non-pulmonary deaths, it will be noticed that the figure (44) for 1930 is considerably below the average. That for 1929 (53) shows a closer approximation to the average figure. An analysis of these deaths shows that a large proportion (25 out of 44) were due to acute forms of tuberculosis, viz., Tuberculous Meningitis or Miliary Tuberculosis. Sanatorium treatment is of little or no avail in such cases. Some time previous one of these patients had been treated for Pulmonary Tuberculosis and one for Tuberculosis of the Spine. Of the remaining 19, 11 were due to Tuberculosis of the Intestines, 3 to Tuberculosis of the Spine, 1 to Tuberculosis of the Knee-joint, and 4 to Tuberculosis of the Kidneys, Bladder, &c. Three of these cases had had Sanatorium treatment.

Dispensary Register.

At the request of the Ministry of Health, a register called the Dispensary Register (not to be confused with the Notification Register) was commenced in 1926. In this are entered the names of all patients examined at or in connection with the Dispensary. Many of those examined are, of course, found to be non-tubercular. Others have to be examined repeatedly before one can come to a definite decision. As soon as a negative decision is arrived at the name is crossed off the Register. Similarly the names of those patients who remove to other areas outside the city boundary are taken off, and an intimation is sent to the Medical Officer of Health of the district to which they remove. Also on the death of a patient the name is removed, so that the Register, which is kept thoroughly up to date, contains the names of all tubercular patients as long as they are under Dispensary supervision.

The number on this Register is likely to be smaller than that on the Notification Register, as those who are not examined at the

Dispensary (e.g., better class patients and those in institutions such as the City General Hospital, Mental Hospital, &c.), do not appear in it.

The following table recently made out for the Ministry of Health from information contained in this Register may prove of interest :—

ANALYSIS OF CASES ON DISPENSARY REGISTER

DIAGNOSIS	Pulmonary				Non-Pulmonary				Total			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A New Cases examined during the year :—												
(a) Definitely T.B. ..	206	141	38	31	12	11	12	11	218	152	50	42
(b) Doubtfully T.B. ..	..	..	..	..	..	..	..	..	58	29	15	16
(c) Non-Tuberculous ..	..	..	..	..	..	..	..	..	87	68	51	36
B Contacts examined during the year :—												
(a) Definitely T.B. ..	1	5	2	3	..	..	1	..	1	5	3	3
(b) Doubtfully T.B. ..	..	..	..	..	..	..	..	..	..	1	1	2
(c) Non-Tuberculous ..	..	..	..	..	..	..	..	..	22	41	74	77
C Cases written off Dispensary Register :—												
(a) Cured	17	28	1	1	1	2	4	2	18	30	5	3
(b) Diagnosis not confirmed or non-tuberculous .. ..	..	..	..	..	..	..	..	..	126	127	122	118
D Number of Persons on Dispy. Register on Dec. 31st, 1930 :—												
(a) Diagnosis completed	1060	1026	465	372	55	72	74	64	1115	1098	539	436
(b) Diagnosis not completed .. ..	..	..	..	..	..	..	..	..	44	39	21	16
Total patients on Dispensary Register on December 31st, 1930 = 3,308												
1. Number of persons on Dispensary Register on January 1st, 1930			3,104		3. Number of patients transferred to other areas and cases "lost sight of" ..						171	
2. Number of patients transferred from other areas and "lost sight of" cases returned			73		4. Number of observation cases under A (b) and B (b) above, in which the period of observation exceeded two months						55	

Tuberculosis Dispensary as the "Centre for Diagnosis."

The Tuberculosis Dispensary continues to hold its place as the "Centre for Diagnosis," and doctors have no hesitation in sending patients whenever they have any doubt as to the presence or absence of Tuberculosis. Notes from 87 different doctors requesting an opinion on 444 cases were received and dealt with during the past twelve months. In addition, many patients, not under

medical attention, called on their own initiative desiring to know whether they had consumption.

Contacts to the number of 227 chiefly those with symptoms which might be due to tubercular trouble have been repeatedly examined. In this way one finds cases in the early stages of the disease.

The Ministry of Pensions regularly send their cases for examination, in many of whom an opinion is desired as to the presence or absence of tuberculosis. The number of these examinations has naturally fallen considerably during recent years. 40 examinations and reports were made on these cases as compared with 31 last year, 67 in 1928 and 161 in 1927.

Clinical Examinations.

Altogether 3,615 clinical examinations were made, an increase of 283 on the previous year. Particulars are as follows:—

	Men.	Women.	Children.	Total.
First examinations ..	361	293	342	996
Re-examinations ..	725	824	1,070	2,619
	<hr/> 1,086	<hr/> 1,117	<hr/> 1,412	<hr/> 3,615

Bacteriological Examinations.

Bacteriological examinations to the number of 1,393 have been made for the tubercle bacillus, as compared with 1,458 in 1929. Of these 408 were examined for doctors in practice in the City, and the remainder were obtained from patients examined at the Tuberculosis Dispensary. Sputum examination, if there be any expectoration, forms part of the complete examination of every patient sent for an opinion, before reporting to the doctor.

The following figures give the results of examinations:—

Nature of Specimen	Positive	Negative	Total
Specimens of Sputum:—			
From Practitioners.. ..	81	327	408
From Patients examined at Dispensary	267	701	968
Specimens other than sputum ..	1	16	17
	<hr/> 349	<hr/> 1,044	<hr/> 1,393

Patients Passed for Sanatorium Treatment.

The "Admissions Committee," consisting of two or more members of the Hospital and Dispensary Committee, attends at the Tuberculosis Dispensary each Monday afternoon, and, in conjunction with the Tuberculosis Officer and Medical Superintendent of the Sanatorium, interviews and selects from patients examined during the previous week, cases for Sanatorium treatment. During the past year 497 patients were passed for a course of Sanatorium treatment; 403 adults (of whom 14 were surgical), 15 children (surgical cases), and 75 children (pulmonary cases). In 1929 the total was 548, being 410 adults (of whom 9 were surgical cases), 13 children (surgical cases) and 116 children (pulmonary cases).

Twenty of the adult pulmonary cases had previously received Sanatorium treatment as children.

Unfortunately, owing to our limited accommodation, many patients who desired admission or re-admission to Sanatorium had to be refused. For months back the waiting list has been very heavy, and often a month or two months, or even more, elapses between a patient being passed for admission to Sanatorium and his entering the institution.

Throughout the year, owing to the continued prevalence of Smallpox, the Children's Sanatorium at Anstey Lane has had to be used as a Smallpox Hospital—the purpose for which it was originally intended. Accommodation was provided in one of the blocks of the Isolation Hospital for 30 children with Pulmonary Tuberculosis. By this means it has been found possible to provide Sanatorium treatment for 75 children during the past year.

Patients on Dispensary Treatment.

Medical Benefit is available for most patients by means of the State Insurance, Public Medical Service, &c., so that only those patients not so provided for are dealt with at the Dispensary. During the year 256 patients received treatment at the Dispensary, and at the end of the year there were 118 patients attending the Dispensary each week. All other patients are advised to attend periodically for advice.

Those children who have had a course of treatment and been discharged from Sanatorium are advised to attend the Dispensary once a week in order that they may be kept under careful supervision. When fit for school an intimation is sent to the School Medical Officer.

Attendances.

The total number of attendances of patients at the Tuberculosis Dispensary during the year was 13,049 (as compared with 12,336 in 1929), a weekly average of over 250.

Domiciliary Treatment.

Those insured patients under the State Insurance who, for one reason or another, do not receive Sanatorium treatment, besides others discharged from the Sanatorium, are recommended for "domiciliary treatment" under their panel doctors. An intimation to this effect is sent to the doctor, and quarterly reports on the patient's condition are sent by him to the Tuberculosis Officer. During the year 503 patients received Domiciliary treatment and at the end of the year 302 insured patients were receiving such treatment. 788 quarterly reports were sent in regarding patients under domiciliary treatment.

Visits.

There are three nurses on the Dispensary Staff who spend about one third of their time indoors and two thirds outdoors visiting newly notified cases besides all those patients whose names are on the Dispensary Register. As one nurse is constantly required for the indoor work, only two nurses can be visiting at a time. They give advice both verbal and printed to each patient and obtain full particulars as to the home conditions, contacts, &c. Their total visits for the year amounted to 7,958. In order to ensure regular visitation to each patient the card index system was adopted for each nurse.

The number of visits paid by the Medical Officers for the purpose of consultation was 282.

Sleeping Shelters.

Nine ex-sanatorium patients have had the use of sleeping shelters, one for over 7 years, two for over 3 years, two for over 2 years, two for over 12 months and two for under 12 months.

Most of the sleeping shelters, which have been in use for many years, are now almost completely worn out. New ones are being purchased as required.

Unfortunately those persons most requiring shelters very often have not the necessary ground on which they could be erected.

Additional Nourishment.

The Health Committee grant milk to necessitous cases, under arrangements made by the Ministry of Health. They can do so up to a sum not exceeding £2 per thousand of the population per annum, and are thus enabled to carry on the grant formerly made by the Insurance Committee. Now, however, all persons, whether insured or non-insured (e.g., children), can have this benefit.

In April, 1927, the Committee decided to purchase only Grade A (T.T.) milk for this purpose.

Mr. Councillor C. E. Keene has again dealt with the applications for milk. He attends at the Dispensary every alternate Friday and reviews each case every four weeks. I desire here to record my appreciation for the very thorough way in which he deals with them.

During the past year 158 persons were granted milk (as compared with 172 in 1919) free of charge, at a total cost of £431 8s. 9d. Last year the total expenditure was £461 8s. 10d. and for 1928 the figure was £459 2s. 6d.

At the end of the year 60 patients were in receipt of a daily allowance of free Grade A (T.T.) milk.

Nursing of Bedridden and Surgical Cases.

The Health Committee, by an arrangement with the District Nursing Association, provide the services of a nurse to assist bedridden cases of Pulmonary Tuberculosis and those Surgical cases in need of dressings, &c. This work is under the general supervision of the Tuberculosis Officer, and each patient having the services of a district nurse is periodically visited by one of the Tuberculosis Health Visitors. During the past year 110 cases received assistance in this way. Altogether 5,521 visits were paid at a total cost of £276 1s. 0d. The figures in the previous year were 4,834 costing £241 14s. 0d.

After-Care.

Many of the previous headings such as visits, use of sleeping shelters, additional nourishment, nursing of bedridden cases, &c., might well have been included under the term "After-Care." A very important branch of the work consists in looking after patients after their discharge from Sanatorium.

The After-Care Committee, with Mr. Councillor Hincks as Chairman, meets once a quarter and deals with reports from the Tuberculosis Officer and each of the nurses.

We have at the present time 3,308 patients with signs of tubercular disease on our Dispensary Register. Our endeavour is to keep in touch with each of these patients by visitation by the nurses and regular examination at the Dispensary as long as their names remain on the Register.

It is found that the patients very much appreciate these visits, and the knowledge that they are not allowed to drift after leaving Sanatorium stimulates them to help themselves. They seek advice in many different directions, and the nurses have been able to help and encourage them in many different ways.

A difficult problem is finding suitable work for tubercular patients. One cannot blame employers for hesitating to engage them. Many of them are only fit for light work and cannot be depended upon to turn up with the same regularity as healthy individuals. Light outdoor work, such as would be desirable for tubercular persons, is extremely difficult to obtain and is almost always unremunerative, so for a married man with dependents it is out of the question. Yet we know that in many cases a return to arduous indoor work is simply asking for trouble.

This problem of suitable work, difficult in normal times, is at present very much accentuated when so many able-bodied men are out of work.

Applications for financial assistance from 19 patients were dealt with, and clothing, dentures, &c., granted where necessary. The total cost was £30 12s. 8d. For 1929 the sum expended was £35 17s. 4½d., for 1928 £55 9s. 4d., for 1927 £40 12s. 4d., for 1926 £51 4s. 10d., and for 1925 £71 1s. 9d.

Thanks to the kindness of Canon Sturdee, for the sixth year in succession, we received a large number of toys, which were distributed during the past Christmas to about 100 of the poorer class children who attended the Dispensary. Needless to say, these were very much appreciated.

WYVILLE S. THOMSON.

APPENDIX II.

Report on the Isolation Hospital and Sanatorium for the Year 1930.

By H. STANLEY BANKS, M.A., M.D. (Glas.), D.P.H. (Camb.).

Medical Superintendent.

Table A at the end of this Report shows the number of cases of the various diseases admitted, discharged, and died. In this table the crude figures have been adjusted by allowing for altered diagnosis.

SCARLET FEVER.

General Statistics.

Number of cases Discharged--

(With diagnosis of S.F. on admission)	270
Altered diagnosis (mostly Rubella, Tonsillitis and various rashes)	48

Number of verified cases Discharged 222

Number of Deaths caused by Scarlet Fever nil

Concurrent Double Infections, &c.—

Scarlet Fever and Chickenpox	4
„ „ Rubella	1
„ „ Acute Pneumonia (fatal)	1

In the fatal case, Acute Broncho-Pneumonia, which was present on admission, was the cause of death.

Cross Infections—

Not a single cross infection with one of the common fevers occurred during the year. In two cases a secondary tonsillitis, probably the result of a cross infection, appeared in the Ward.

Return Cases 2

“Return” case rate per cent. of discharges .. 0.9

Complications.

	Cases	Results	
Present on admission	.. 22	cleared up	22

Occurring after admission—

Acute Suppurative Otitis Media	5	cured	.. 5
(i.e., perforation healed : ears dry 7 days)			
Acute Mastoiditis	.. 1	cured	.. 1
Acute Nephritis	.. 2	cleared up	.. 1
Albuminuria	.. 2	cleared up	.. 2
Acute Arthritis (mild)	.. 2	cleared up	.. 2
Secondary Adenitis	.. 3	cleared up	.. 3
Secondary Tonsillitis	.. 3	cleared up	.. 3
Acute Broncho-Pneumonia	.. 1	cleared up	.. 1
Various Minor Septic Foci	.. 20	cleared up	.. 20

Total Complications occurring after admission (mostly trivial) 39

Complication-rate of verified cases discharged per cent., 17.5

Average duration of residence in hospital of all verified cases days 23

Treatment.

Intra-venous Anti-toxin. This treatment, described in the last two annual reports, was again the routine treatment of choice during 1930. It was used especially in all well-marked and severe cases admitted up to the 4th or 5th day of disease. Certain cases were excluded, chiefly :—(1) those judged to be very mild or doubtful, (2) cases admitted after the 5th day of the disease, (3) cases in which mechanical difficulty was encountered with intra-venous injection, and (4) a few cases who had a history of serum administration in recent years. The actual number treated

with intra-venous serum was 144 cases or 64 per cent. of the verified cases discharged. This compares with 55 per cent. in 1929 and 41 per cent. in 1928.

This treatment was again found generally very satisfactory. The acute stage of the disease was shortened very materially, the temperature falling by crisis and the **facial œdema disappearing within 12 hours**. The latter fact appears to be of great importance, since it relieves Eustachian obstruction so rapidly that middle ear inflammation becomes exceedingly rare. Acute Suppurative Otitis Media, with no previous history of ear discharge, actually occurred in three cases in this series, ear discharge occurring on the 4th, 10th and 11th day respectively, after admission. In the first case there was pain in the ear from the day before admission, and presumably the middle ear inflammation had actually begun when the serum was given. The second case was associated with chronic purulent nasal and post-nasal discharge, and in the third case the dose of serum was insufficient, only half the standard dose having been given. The incidence of acute Suppurative Otitis Media in Scarlet Fever treated with intra-venous anti-toxin according to certain technique is, judging by the results in about 800 cases, quite negligible.

Desquamation was greatly modified. Generally it did not occur at all in cases treated up to the 3rd day of the disease, and was reduced greatly in those treated on the 4th or 5th days.

Complications in the intra-venous anti-toxin group.

These were comparatively trivial and all cleared up rapidly under treatment. They included :—

Otitis (very mild)	..	..	..	..	3
Arthritis (very mild)	..	..	..	..	2
Various minor septic foci	..	..	..	..	15
do. noted after discharge of patient from hospital	..	..	..	..	4

The number of complicated cases in this series was 16, giving a case rate of **11 per cent. complicated cases** (mostly trivial). The average duration of residence of all cases treated with intra-venous anti-toxin was 20 days.

After-Supervision of Intra-venous Anti-toxin group.

As in the two former years, all cases treated with intra-venous anti-toxin were asked to report for medical examination on the Monday fortnight following their discharge. Under this arrangement all the intra-venous cases were examined, with the result

that the observed defects which might possibly be considered sequelæ of Scarlet Fever amounted only to four trivial septic foci. This measure for after-supervision appeared to work very satisfactorily.

The results of intra-venous anti-toxin treatment noted in this report, while far excelling the results obtained by other methods of treatment, were yet not quite so good as those obtained in the two previous years. This is due to the fact that results were not up to standard in the second quarter of the year. On clinical grounds it seems apparent that a change occurred in the anti-toxin supplied by the firm of Parke Davis & Co. at this period, in two respects, viz.: (1) the anti-toxin supplied then was clinically less potent, dose for dose, than that previously supplied, and (2) it caused less severe and considerably fewer immediate serum reactions. Until this change was observed and the dosage correspondingly increased, desquamation was commonly seen and an undue proportion of complications occurred. As soon as the dosage of the serum was increased by 30 per cent. to 50 per cent. over that recommended in 1928, the results again became satisfactory. Desquamation and complications were again rarely seen. The net result of this experience, however, is reflected in the statistics for the year in respect that the number of complications and the average duration of residence of the intra-venous cases are slightly increased as compared with former years.

The table on following page gives the approximate data regarding intra-venous anti-toxin treatment of Scarlet Fever in the three years, 1928-1930.

Intra-Muscular Anti-toxin. Scarlatinal anti-toxin was injected in therapeutic dosage intra-muscularly in 16 cases, and in smaller dosage as a prophylactic in 14 cases.

In the former group the intra-muscular route was chosen chiefly on account of inaccessibility of veins for intra-venous injection. The average duration of residence in hospital of this group was 31 days. In the latter group, diagnosis of Scarlet Fever was in doubt, and a small dose of serum was given for protection. This group comprised 14 cases, and the average duration of residence in hospital was 28 days.

No **Anti-toxin** was administered in 48 cases. These were, for the most part, cases admitted on or after the 5th day of the disease, i.e., too late for serum to be effective. A few were very mild cases in which specific treatment did not seem to be worth while. The average duration of residence in this group was $27\frac{1}{2}$ days.

INTRA-VENOUS ANTI-TOXIN TREATMENT OF SCARLET FEVER.

Year.	Cases Treated.	AVERAGE STAY IN HOSPITAL.		Percentage of all verified cases discharged.	COMPLICATIONS.					Number of com- plicated Cases.	Per cent. of com- plicated Cases.	Deaths.
		All verified Cases.	Intravenous Cases.		Otitis.	Nephritis.	Arthritis.	Various Minor Septic Foci.	Noted after discharge from Hospital.			
1928 ..	404	24 days	17½ days	41%	—	—	—	13	9 trivial	22	5.4%	1
1929 ..	172	21 "	16 "	55%	1	1	1	5	2 trivial	9	6.2%	—
1930 ..	144	23 "	20* "	64%	3	—	2 (very mild)	15	4 trivial	16	11%	—
1931 .. (1st Quar.)	62	17.2 "	16 "	88%	1	—	—	8	—	7	11%	—

*NOTE.—A change apparently occurred in the anti-toxin potency during 1930, which, until compensated by increased dosage, led to an increase of complications, and lengthened stay in Hospital.

In the latter part of the year a new arrangement was made by which Scarlet Fever cases were admitted on receipt of a telephone message from a medical practitioner direct to the hospital instead of through the Public Health Office as formerly. This arrangement has so far worked well and has reduced very materially the number of cases admitted late in the disease. It is thus possible to treat a greater proportion of the cases now with intra-venous anti-toxin and so secure better results. In actual fact, during the last quarter of the year, 82 per cent. of the verified cases were so treated, and the average stay in hospital of these cases was $17\frac{1}{2}$ days.

DIPHTHERIA.

General Statistics.

Number of cases Discharged

(With diagnosis of Diphtheria on admission)	..	225
Altered diagnosis	.. .. .	44
Number of verified cases Discharged	.. ..	181
Number of Deaths	.. .. .	6
Death-rate per cent. of verified and completed cases	.. .. .	3.2
Death-rate per cent. of verified and completed cases (excluding laryngeal cases and cases dying within approximately 24 hours of admission)	.. ..	1.6

Cause of Deaths.

(a) Severe Toxic or Malignant Diphtheria (Group A).

- f. age 6: Hæmorrhagic when admitted on 7th day of disease. Died on 13th day of disease from heart paralysis and suppression of urine.
- f. age 2: Hæmorrhagic when admitted in a late stage of the disease: faucial and laryngeal membrane and extreme toxicity. Died of toxæmia within $5\frac{1}{2}$ hours of admission. (Blood cherry-red in colour and non-coagulable.)
- f. age 5: Extremely toxic case admitted on the 4th day of disease. Hæmorrhagic on 5th day. Died on 6th day of toxæmia.

(b) Laryngeal Diphtheria.

- f. age 5: Post-operative Faucial, Laryngeal and Tracheal Diphtheria. (Operation—Tonsillectomy). Death from toxæmia and exhaustion within 14 hours of admission.
- m. age 5: Measles followed by Laryngeal Diphtheria, Tracheotomy, Pneumonia. Death within 26 hours of admission.

(c) Untreated till very late stage.

- m. age 4: Acute stage not diagnosed. Admitted on 16th day of disease. Died a week later from late heart failure.

"Leicester" Classification of Diphtheria (see Annual Report for 1929).

Group A. Malignant or severely toxic cases.

Group B. Moderately toxic cases.

Group C. Slightly or non-toxic cases.
(I) moderate; (II) mild.

Others. Laryngeal and Nasal (where the membrane in these situations predominates).

Septic: associated with oedema and ulceration: swabs show streptococci or putrefactive organisms.

Bacteriological: throat swabs positive: no signs or symptoms of disease.

Sub-Classification.

Early Cases: Those admitted on or before the 3rd day of disease.

Late Cases: Those admitted after the 3rd day of disease.

DIPHTHERIA.

Classification and Summary of Cases—Year 1930.

Classification.	No. of Cases.	No. of Deaths.	Complications.								Treatment.		Average stay in Hospital.
			Post-Diphtheria Paralysis.								Average dose of Anti-toxin.		
			Heart (slight).	Heart (severe).	Diaphragm	Pharynx.	Palate.	Ocular.	Anuria.	Limbs.	Intra-venous.	Intra-muscular.	
											Units.	Units.	Days.
Group A (early)	6	-	6	-	-	-	5	2	-	3	170,000	-	83
Group A (late) (recovered cases)	4	-	1	-	-	-	3	2	-	2	155,000	-	81
Group A (late) (fatal cases)	3	3	-	1	-	-	-	-	1	-	170,000	-	3½
Total Group A	13	3	7	1	-	-	8	4	1	5			
Group B (early)	12	-	2	-	-	-	-	-	-	-	30,000	15,000	45
Group B (late)	12	-	3	-	-	-	3	1	-	2	36,000	8,000	57
Total Group B	24	-	5	-	-	-	3	1	-	2			
Group C 1 (moderate)	55	-	5	-	-	-	-	-	-	1	10,000	13,000 (alternate)	47
Group C 2 (mild)	53	-	-	-	-	-	-	-	-	-	-	6,000	32
Total Group C	108	-	5	-	-	-	-	-	-	1			
Septic	7	-	-	-	-	-	-	-	-	-	26,000	12,000	28
Laryngeal	13	2	3	-	-	-	-	-	-	-	12,000	15,000	48½
Nasal	13	-	-	-	-	-	-	-	-	-	-	10,000	41½
Bacteriological	3	-	-	-	-	-	-	-	-	-	-	-	17

Group A.

The mortality in this group of highly toxic cases was 23 per cent. (3 out of 13 cases), which may be regarded as more than usually satisfactory.

In the Annual Report for 1929 the intensive serum treatment of toxic Diphtheria was discussed. The opinion was expressed that large doses of 100,000 to 200,000 units were indicated in the highly toxic cases (Group A), and that while such doses of serum were usually given partly intra-venously and partly intra-muscularly, a preference was being developed in our own practice for intra-venous injection alone. This tendency developed still farther during the year 1930.

The intra-venous route was used alone for all cases of Group A, and most of Group B. Even in Group C 1, a number of the cases were treated with intra-venous serum. Increasing experience has indicated that more effective and rapid results may be obtained in this way, and particularly that the acute stage may be shortened and the number and severity of complications reduced.

The serious forms of post-diphtheritic paralysis are now exceedingly rarely seen. It was suggested in last year's report that if late heart failure occurs in a case of Diphtheria treated before the 5th day, this is a clear indication that the dose of anti-toxin administered has been inadequate. Another year's experience tends to confirm this view. Intensive intra-venous serum in well-judged dosage before the 5th day practically abolishes mortality from the late complications of Diphtheria.

Septic Diphtheria. There were seven cases which could clearly be allocated to this group. In these there was clinical evidence of much faucial inflammation and œdema, and the organisms identified included the streptococcus and putrefactive organisms of the "Vincent" type in addition to Klebs-Loeffler bacilli. No case in this group was fatal. One case in which the Diphtheritic element was minimal, was not treated with anti-toxin, but was actively immunised against diphtheria.

Laryngeal Diphtheria. There were thirteen cases in this group, of which two died and eleven recovered. The fatal cases were associated with measles and with the operation of tonsillectomy, respectively. Tracheotomy was performed in seven cases. Slight paralysis of the heart (extra-systoles) were noted in three of the recovered cases. Serum was generally given both intra-venously and intra-muscularly in these cases, although, in three cases, it was given intravenously only, in a dose of 20,000 units.

Nasal Diphtheria. There were thirteen cases of nasal diphtheria, all non-toxic and uncomplicated. Two of these were not treated with anti-toxin but were actively immunised.

Bacteriological Diphtheria. In three cases the throat swab was positive for the diphtheria bacillus, without clinical evidence of the disease. These cases were actively immunised.

Altered Diagnosis :—

Acute Tonsillitis or Faucitis	30
Vincent's Angina	5
Septic Angina (Ludwig)	1
Laryngismus Stridulus	2
Septic Scarlet Fever	1
Pulmonary Oedema	1
Pseudo-diphtheria	1
Ulcerative Stomatitis	1
Carcinoma	1
	—
	43

It will be seen that a relatively large number of cases in which diphtheria was suspected were sent into hospital as a precautionary measure. In these the Schick test was freely used as an aid to diagnosis. When the Schick test was positive and, clinically there was no evidence of diphtheria, active immunisation with toxoid was carried out, no anti-toxin being given. This policy saves a considerable amount of time and accommodation as compared with the older method of giving anti-toxin indiscriminately to every case admitted.

Double Infections on Admission.

Diphtheria and Scarlet Fever	1
„ „ Measles (fatal)	1
„ „ Whooping Cough	1
„ „ Chickenpox	1
„ „ Pneumonia	1

Cross Infection of Diphtheria Wards.

One case of Scarlet Fever occurred in January as a result of the admission to the Ward of the doubly-infected case of Diphtheria and Scarlet Fever noted above. Another case of Scarlet Fever occurred in December, and the infecting source was not discovered.

These were the only two instances of "cross infection" according to the usual interpretation of this term. There were, however, in addition, a number of catarrhal infections, coryza, tonsillitis, &c., transmitted in the ward from case to case, and probably also through the nursing staff. In this connection the lack of side-ward accommodation in the diphtheria block was acutely felt from time to time, especially during the winter.

Operations.

	Cases.	Recovered.	Died.
Tracheotomy	7	6	1
Tonsillectomy in virulent carrier	1	1	—
Abscess	1	1	—

Virulence Tests.

Animal inoculation tests for virulence of positive swabs were done chiefly in two groups of cases : (1) Cases in which the clinical evidence was not in favour of a diagnosis of Diphtheria ; and (2) convalescent cases with persistent positive swabs. In these groups, the virulence test affords valuable information upon which appropriate action can be based.

During the year 46 such tests were performed, 38 being positive and 8 negative.

Schick Tests.

In 35 cases in which doubt existed as to the diagnosis, the Schick test was performed. All positive cases were immunised against diphtheria, either actively or passively.

Active Immunisation against Diphtheria.

In 23 cases in whom the Schick test was positive without clinical evidence of Diphtheria active immunisation with toxoid was carried out.

ENTERIC FEVER.

Three verified cases of Enteric Fever were treated.

Case (1). A district nurse, age 26 ; recovered after 51 days in hospital.

Case (2). A commercial traveller, age 33 ; complications were (a) thrombosis of superficial vein of left leg and (b) infarct of lung ; recovered after 69 days in hospital.

Case (3). A boy, age 15 ; recovered after 48 days in hospital.

CEREBRO-SPINAL FEVER.

The incidence of this very serious disease has been steadily rising in the past few years. In 1928 there were only two cases

admitted, in 1929 seven cases, and in 1930 nine cases. Most of the cases were admitted very late in the disease, having been sent in the first instance to the Royal Infirmary and transferred to Groby Road after the diagnosis was established. Treatment was therefore generally not instituted until the disease had progressed to a fairly late stage. Another unfavourable factor was the age incidence, three of the fatal cases being infants under one year, and one a man of 56 years. Of the nine cases, 6 died and 3 recovered. Seven of the cases were treated by the intensive intra-venous serum method (*Lancet*, 4th April, 1931), and in the remaining cases, both young infants and both fatal, this form of treatment was impracticable.

Recovered Cases.

- (1) **f. age 9 months :** Lumbar puncture successful throughout course of disease. Discharged well after 83 days.
- (2) **m. age 1 year and 4 months :** Lumbar puncture successful throughout : had two relapses, each treated with intensive serum.
- (3) **m. age 14 years, from an industrial school :** Admitted on 5th day of disease : responded rapidly to intensive serum.

Fatal Cases.

- (1) **m. age 9 weeks :** Lumbar puncture failed after two or three taps.
- (2) **m. age 9 months :** Lumbar puncture failed after two or three taps.
- (3) **m. age 11 months :** Lumbar puncture failed after two or three taps.
Improvement under intensive serum : later relapsed : subarachnoid blockage and hydrocephalus.
- (4) **m. age 2 years and 2 months :** A very late case with purulent Cerebro-Spinal fluid : lumbar puncture failed : died after 4 weeks.
- (5) **f. age 6 years :** A fulminating case, died within 48 hours of admission.
- (6) **m. age 56 years :** Improved under intensive serum treatment : later relapsed and died after 5 weeks.

PUERPERAL FEVER.

An increasing number of cases of Puerperal Fever are treated in this hospital, the numbers for the last four years being 1, 4, 7 and 13 cases respectively. Of the thirteen cases nine recovered, three died, and one was transferred to the Royal Infirmary for surgical operation.

Recovered Cases.

Puerperal Sepsaemia, associated with retained placental tissue	7
Puerperal Sepsaemia, associated with septic tears ..	1
Septic Incomplete Abortion	1

The complications in these cases included :—

Cystitis	4
Pyelitis	1
Phlegmasia alba Dolens	2
Pneumonia and Pleurisy	1
Suppurative Mastitis	1

In three cases it was found possible to maintain the breast milk secretion, so that the mother could nurse her infant after discharge from hospital. These cases were in hospital 41, 28 and 26 days respectively. They were reported to the Child Welfare Department for supervision.

Fatal Cases.

Septicaemia associated with retained placenta : fatty degeneration of organs	1
Septicaemia associated with septic tears	1
Septicaemia and Pyaemia when admitted	1

Transferred to Royal Infirmary.

One case found to have general peritonitis was transferred for operation after 3 days.

The routine treatment for Puerperal Fever included :—

- (a) gentle clearing of uterus,
- (b) daily glycerine drainage of uterus,
- (c) injection of streptococcus anti-toxin,
- (d) maintenance of breast milk, whenever possible and if desired.

ERYSIPELAS.

Twenty-one cases of this disease were treated, of whom twenty recovered, and one, a man aged 82, died of hypostatic pneumonia associated with the condition. As in the two previous years, ultra-violet light proved to be a very successful method of treatment,

and administration of serum was not found to be necessary. In the early part of the year serum was given intra-muscularly to one case of Erysipelas of face and neck in a man aged 33 years. The inflammation spread to the back within 48 hours, and was then readily checked by application of ultra-violet light. No other instance of "wandering Erysipelas" occurred.

Site.

Face and Neck	..	..	..	..	18
Leg or Thigh	..	..	..	..	3

Age incidence varied from 9 weeks to 82 years. The recovered cases included persons aged 55, 62, 67 and 77 years.

Complications.

Abscesses of scalp	..	..	..	..	1
Gland abscess	..	..	..	..	1
Cellulitis of leg	..	..	..	..	1
Purulent Conjunctivitis	..	..	..	..	1

The average duration of residence was 18 days.

MEASLES.

Seven verified cases of measles were treated. Four of these exhibited the serious complication, broncho-pneumonia.

One of them required the operation of tracheotomy for the accompanying acute laryngitis. Of the four broncho-pneumonia cases, three recovered and one died. The fatal case was an infant, age 12 months, with signs of gross rickets. One child, age 2 years, whose broncho-pneumonia was also associated with gross rickets, and with convulsions and discharging ears, recovered.

One child, age 3 years, after recovery from the acute broncho-pneumonia exhibited signs of chronic pulmonary catarrh at the base of the right lung. She was kept in hospital for three months and, on discharge, no abnormal signs in the lungs could be detected.

WHOOPING COUGH.

Six cases were treated. Four of these were admitted with Chickenpox in addition to Whooping Cough; one had a septic skin condition (impetigo) and abscesses of scalp; and one had acute broncho-pneumonia associated with whooping cough. All six cases recovered.

PNEUMONIA.

Three cases of acute Lobar Pneumonia were admitted. Two were fatal, women aged 42 and 43 years respectively. One case, a lad of 16 years, recovered.

SMALLPOX.

Anstey Lane Hospital was continuously open during the year as a smallpox hospital, and very considerable numbers of cases were passed through.

Admissions numbered 1,142, discharges 1,118, and there were also 72 smallpox contacts admitted for observation.

One death associated with Smallpox occurred, viz., a baby three weeks old, admitted in a grave condition (dehydrated and taking convulsions), who died within 24 hours of admission.

Another death occurred from cerebral tumour, unassociated with smallpox.

All the cases were definitely minor smallpox. No case of true major smallpox occurred, although in a few instances the rash was very profuse. There was no case of confluent or hæmorrhagic rash, nor of secondary fever.

The cases were classified according to the nature of the eruption as follows:—

Profuse Discrete	..	..	..	..	10
Discrete	..	..	..	..	75
Mild	..	..	..	..	238
Very Mild	..	..	..	..	793

Two babies were born in the Smallpox Hospital, of mothers who were suffering from the disease.

One of the babies, born on October 8th, when the mother's rash was full out, was apparently infected with smallpox *in utero*. A discrete smallpox eruption appeared on this baby on October 19th, i.e., 11 days after its birth; vaccination performed on the day after birth pursued its ordinary course concurrently with the smallpox.

The other baby, born on May 12th, was vaccinated on May 13th and did not develop smallpox.

Vaccination.

73 of the cases, all of middle or advanced age, had been vaccinated in infancy. Of the contacts who were vaccinated on admission to the ward, smallpox **did** not develop in 51 cases.

Treatment.

This was negligible except in the few profuse discrete or discrete cases. In these continuous fomentations or baths were applied for a few days. Complications were practically absent and there was no permanent disability produced.

OTHER INFECTIOUS DISEASES.

German Measles (admitted with diagnosis of					
Scarlet Fever)	..	..	..	5	—
Acute Broncho-Pneumonia	..	..	..	1	1
Acute Broncho-Pneumonia and Empyema				1	—
Mumps, &c.	..	..	..	2	1
					(age 3 months)
Chickenpox	..	..	..	1	—
Encephalitis	..	..	..	—	1
Burns of Scalp and Meningitis	..	..	..	—	1
Various	..	..	..	4	—

In addition, there were five infants admitted with their mothers (cases of puerperal fever) to the Isolation Block ; and also six cases of illness amongst the nursing and domestic staff.

IONISATION IN OTITIS MEDIA.

As in past years, all cases of ear discharge persisting for more than a few days had ionisation performed at intervals of four or five days until the ears were dry. Results were again very satisfactory. There were seven such cases of acute Suppurative Otitis Media, five following Scarlet Fever, and two following Diphtheria. All were discharged from hospital with ears dry for at least seven days, and the perforation in the drum of the ear healed. It was again unnecessary to refer any of these cases to the School Clinic.

There were in addition a number of chronic otorrhœa cases with a history of ear discharge before admission. These were also ionised and with very few exceptions the ears were dried up at least temporarily.

TUBERCULOSIS.

Classification and Results of Treatment.

Table E at the end of this Report gives the classification of patients on admission to the Sanatorium and Hospital Wards for Tuberculosis, and also their classified condition at time of discharge.

The salient features of Table E are :—

(1) Group T.B. Minus.

Some years ago the Ministry of Health pointed out that this group was unduly large in Leicester probably owing to the fact that an insufficient number of sputum examinations were made. This view proved correct. The position has now been remedied. During the last two years the number of sputum examinations has increased to approximately $4\frac{1}{2}$ times the number for the year 1927. In consequence, the number of patients classified as T.B. Minus has fallen from 55 per cent. to 22 per cent. of all adult pulmonary cases. This figure may now be regarded as stabilised. It is very slightly increased as compared with last year, owing to the fact that a larger number of observation cases were admitted (62 as compared with 40 in 1929).

Year.	CLASS T.B. MINUS.		Specimens of Sputum examined for T.B.
	Number of Adult Pulmonary Cases.	Percentage of all Adult Pulmonary Cases.	
1927	187	55	332
1928	136	41	1168
1929	80	20.9	1536
1930	89	22	1489

(2) Duration of Residential Treatment.

The average duration of residence of all adult pulmonary cases discharged or died was $16\frac{1}{2}$ weeks.

The classes T.B. Minus and T.B. Plus Group I may be taken to represent "Sanatorium cases" proper as distinguished from advanced or "hospital" cases. Of such "sanatorium cases" 38 per cent. had less than 3 months' treatment and 55 per cent. had 3 to 6 months' treatment.

These figures, though not yet satisfactory, represent a 10 per cent. improvement over the figures for last year, i.e., 10 per cent. more "sanatorium" patients extended their period of treatment beyond 3 months. In addition, a goodly number underwent a further two to three months' treatment at the convalescent sanatorium, Home Place, Holt.

Prolonged Sanatorium treatment at the first breakdown in health is greatly to be encouraged. The patients are now being definitely taught that the cure of established pulmonary tuberculosis cannot be accomplished under **three years**, and that a period of 6 to 12 months should if possible be spent in the Sanatorium as the first stage in treatment, the remainder of the treatment being carried out at home. The figures presented above tend to indicate that this teaching is having some effect, and that suitable patients are voluntarily extending their stay in the Sanatorium and are facing courageously the economic problems involved.

With regard to advanced cases (Class T.B. Plus, Group 2 and 3), just under 50 per cent. had 3 to 6 months' treatment, which generally sufficed to "patch them up" sufficiently to allow them to live more or less comfortably for a time at home. It is to be feared that this system in many cases merely prolongs life, and consequently infectivity, without restoring working capacity or rendering the recipients fit to be useful members of society. The problem of the middle and moderately advanced case has not yet been solved. Segregation in some form of colony appears to be the ultimate solution, but this would not appear to be practicable until the number of cases so affected is reduced to manageable limits. For the present, efforts must be directed towards the cure of early cases by instructing them in the necessity for strictly disciplined rest for some years after they leave the Sanatorium. The advantage of this policy is not confined to the individual. It should benefit the community by preventing numbers of them from becoming middle and advanced cases, and so reduce the total amount of gross infection in the city.

(3) **Non-Pulmonary Tuberculosis.**

Among the cases of bone and joint disease, chiefly affecting the hip, joint and spine, 11 were discharged quiescent, 3 with no material improvement, and 4 died.

The fatal cases were :—

- (1) m. aged 28, with tuberculosis of spine and multiple abscesses.
- (2) m. aged 10, with similar condition.
- (3) m. aged 17, with tuberculosis of hip joint, multiple abscesses and generalised tuberculosis.
- (4) f. aged 2, with tuberculosis of shoulder joint: died from tuberculous meningitis.

The treatment of bone and joint tuberculosis is now on very satisfactory lines. The period of treatment in the Sanatorium is of necessity prolonged. During the year it averaged 82 weeks.

(4) Observation for purpose of Diagnosis.

There were 62 cases admitted for periods varying from one week to about 2 months, so as to verify or exclude a diagnosis of pulmonary tuberculosis. This is a useful and necessary provision for the discovery of early cases. Forty-two were finally diagnosed as tuberculous, and admitted as cases for further treatment, ten were discharged as non-tuberculous and ten were classified "doubtful." In connection with diagnosis in this group the X-Ray apparatus plays a very big part.

(5) Pulmonary Tuberculosis in Children.

Anstey Lane Hospital, which for many years was in use as a Children's Sanatorium, was open for Smallpox during the whole of the year. As many of the children as possible were therefore treated in one of the wards of the Isolation Hospital, according to the accommodation available. There were 99 children treated, 20 for less than 3 months, 63 for 3 to 6 months, and 16 for 6 to 12 months.

The special investigation into the nature of the disease from which these children suffered, to which reference was made in last year's report was continued. In every case careful clinical histories and family histories were taken, X-Ray films examined, and tuberculin skin tests (intra-dermal) performed in addition to physical examination. A special search was made in certain cases for the tubercle bacillus in washings from the stomach and in faces, always with negative results. A survey of the literature on tuberculosis and allied diseases of the lungs in children was made. Towards the close of the year the investigation of 100 cases was approaching completion. It is hoped to present a summary of the findings in next year's report.

SPECIAL FEATURES OF SANATORIUM WORK.

Lectures to Patients with Tuberculosis.

This provision has been found to be of the utmost value for early or "Sanatorium" cases. Many of these come into the Sanatorium with utterly false ideas as to what they must do to be cured. They have been persuaded or frightened into giving

up their work and pleasures, and their one thought is to get back to the usual daily round as soon as their "three months" in the Sanatorium is finished, with, in addition, perhaps, a holiday of a fortnight or so at the seaside. Their minds must be cleared of this conception gradually and brought to the simple truth that the only treatment likely to be of permanent value in tuberculosis of the lungs, even at the early stage, is, at least three years of disciplined rest; that the period spent in the Sanatorium is educative, and that, if they wish to remain well, they must continue the Sanatorium methods, especially the regular resting periods, in their own homes for some years.

In order to press this point of view forcibly on their attention, the Medical Superintendent personally lectures to the Sanatorium patients every month. An explanation is given of the nature and course of the disease and how healing is brought about by the influence of rest. The many problems that arise in the technique of cure are discussed and questions invited. Certain books for patients' use, to which reference was made last year, are found useful, and in particular much interest and inspiration is drawn from the study of biographies of such sufferers from the disease as Edward Livingstone Trudeau, and Robert Louis Stevenson.

Artificial Pneumothorax Treatment.

Absolute or completely efficient rest for an affected lung can best be secured by artificial pneumothorax treatment. This treatment is applicable, however, as a rule, only to cases with disease in one lung, although bilateral pneumothorax may be performed under special circumstances. Early artificial pneumothorax treatment is so successful that it should be a matter of policy to adopt it as a routine in all cases where one-sided disease is found by X-Ray examination. As a step towards this ideal the number of cases subjected to pneumothorax is being gradually increased.

Artificial Pneumothorax induced (new cases)	..	16
Refills in these and old cases	.. ..	310
Replacement of pleural fluid by air	.. ..	31
Oleothonax refills	.. ..	5
Pleural irrigations	.. ..	9

Sanocrysin (Gold injection) Treatment.

This form of treatment was fully described in the Annual Report for 1928. It is applied to a different type of case from

pneumothorax, viz., the moderately-advanced case with bilateral disease and fair resistance. Immediate results in well-selected cases are good, but increasing experience tends to show that the advantage gained by the treatment may easily be lost unless the patient's resistance can be maintained by very favourable living conditions. This limits very much the numbers of cases to whom it is worth while to give the treatment. The tendency now is to concentrate on artificial pneumothorax, inducing at an early stage rather than waiting for the disease to develop to the middle or moderately advanced stage.

Number of Sanocrysin injections given . . . 98

Patients' Work Scheme. (Occupational Treatment.)

(a) **Handicrafts.** The scheme of handicraft work for bed patients and patients on graded work, as described in last year's report, was continued. Sales of the products suffered a considerable slump partly owing to the adverse economic conditions prevailing generally, and partly owing to the fact that the local market for the class of goods produced was glutted by similar goods produced by our own ex-patients. This affected particularly sales of cane-work articles, chairs, stools, trays, &c. The sales effected in this section amounted only to £25 9s. 2d., while the expenditure was £47 18s. 5d. A large number of goods were taken into stock for future sales.

(b) **Work for Bed Patients.** Fancy leather goods, purses, pouchettes, handbags, &c., were produced in fair numbers chiefly by bed patients. These patients were provided with materials at about cost price, and they effected their own sales. In this section sale of material amounted to £98 16s. 8d. and expenditure to £84 8s. 11d.

The "Gilroes Handicrafts Fund" through which this work is financed, in spite of the slight loss on the year's working, remains solvent owing to the accumulated profits from past years.

The main object was achieved of keeping the patients occupied with interesting, instructive and suitably light work.

As the importance of complete and prolonged rest in pulmonary tuberculosis becomes more and more realised, the problem of the work scheme becomes one for finding suitable work for a larger number of patients in bed. Ways and means of securing this are matters of constant consideration, and new methods are likely to be evolved in the near future.

(c) **Poultry Keeping.** The model poultry farm commenced two years ago provided grade work for a few patients, and incidentally produced a very considerable number of eggs for the use of the institution. The good laying strains of Rhode Island Red and White Leghorns which have been acquired were strengthened by the elimination of the poorer layers as discovered by systematic trap nesting. The average egg production per bird of the flock for the financial year ended March, 1931, was 9.9 per month, and the average for laying birds of our own stock for the four months, December to March, was 18.4.

Poultry Farm.

Number of birds in stock, April, 1930	..	..	78
Do. do. March, 1931	..	..	290
Number of eggs produced during year 1930-1931			21,848
Number of birds killed for the table	..	..	76
Expenditure on foodstuffs, year 1930-1931	£150	15s. 6d.	
Income from sale of eggs	..	£168	17s. 1d.

(d) **Pig Keeping.** The newly-built piggeries came into use during the year. Pig keeping also provides work for a limited number of men patients, and it appears to be a much more profitable economic investment than poultry keeping. The great advantage of pigs in an institution is that the surplus and waste food is used up profitably. The model pig styes appear to answer their purpose very well, and it is hoped that the hygienic pig keeping, which is our aim, will in time yield a good return on the capital invested.

Piggeries.

Pigs fattened and sold	..	..	..	47
Receipts for do.	..	..	£267	7s. 4d.
Expenditure on do.	..	..	£110	16s. 10d.
Stock in hand (March, 1931), 12 pigs valued at	..	..	..	£21 10s. 0d.

CONVALESCENT SANATORIUM FOR PULMONARY TUBERCULOSIS. "HOME PLACE," HOLT, NORFOLK.

This beautiful mansion was opened in May, 1929, as a branch seaside sanatorium for convalescent cases transferred from Groby Road. The following report relating to the first year's working of the home was presented to and approved by the Committee in September, 1930.

Report on Treatment of Tuberculosis at "Home Place," Holt, during the period May, 1929, to September, 1930.

		Number of Cases Discharged.	Average Period of Treatment.	Average Gain in Weight.
Men	..	47	7 $\frac{3}{4}$ weeks	3 $\frac{3}{4}$ lbs.
Women	..	41	9 "	3 $\frac{3}{4}$ "
Boys	..	13	9 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "
Girls	..	20	11 $\frac{1}{2}$ "	5 "

Objects of the Institution.

(1) To provide further rest and prescribed exercise (but not prolonged nursing) for tuberculosis patients who have had a course of Sanatorium treatment and who are believed to be physically and otherwise capable of receiving permanent benefit from this regime.

(2) To secure for these patients the mental and physical stimulus of "change of scene" by providing hygienic and pleasant surroundings near the sea.

Selection of Patients.

The 22 beds provided in the Institution have been occupied by drafts of women and children and of men who have recently been under treatment in Groby Road Sanatorium. Four batches of women and children and two batches of men have been treated. While the required number of suitable women and children has usually been obtained without much difficulty, it has been found difficult and even impossible to gather together at one time a draft of 22 men patients who were sufficiently well to comply with the conditions. Under existing circumstances this could be attempted only at intervals of about 9 months, and, even then, it was found necessary to include some cases of fairly advanced disease in order to fill all the vacancies.

Immediate Results of Treatment.

Adults : uniformly good except in

- (a) 3 cases removed by ambulance to Groby Road on account of hæmorrhage ;
- (b) a few cases of moderately advanced and progressive disease who were sent for treatment because a sufficient number of early cases was not available at the time. These were mostly men.

Children : uniformly good in all cases.

Remote Results of Treatment.

As in all forms of treatment of pulmonary tuberculosis, remote results depend mainly upon the patient's own will, determination and ability to live, for some years at least, a life of greatly restricted activity.

Comments.

The following points particularly have been noted :—

- (1) **The happiness and pleasure** experienced by patients generally in addition to improvement in health.
- (2) The gain in weight additional to the substantial increase gained at the Sanatorium.
- (3) **The success of treatment** during the winter for women. The restfulness of quiet winter evenings spent in the home has not only an immediate value but also is an education in the life of restricted activity which it is essential for these patients to adopt.
- (4) **The influence on Groby Road Sanatorium.**
 - (a) Some of the pressure on the inadequate bed accommodation in the Sanatorium has been relieved.
 - (b) The effect on morale has been favourable. The patients "in the running" for treatment at Holt are provided with an additional incentive to self-discipline in order to make themselves fit to be selected. Other patients are interested in the news that comes from their ward-mates at Holt, and do not quite lose hope that their turn will come.
 - (c) On the other hand, the awkward break in the continuity of the sanatorium arrangements which occurs when the draft of 22 men leave all at once is a disturbing feature. The work in the wards, workshop and farm usually done by patients is suddenly interrupted, and the work of the staff is suddenly increased owing to the large numbers of admissions and discharges.

Recommendations.

- (1) That a smaller number of men be treated at one time, e.g., 8 to 14, that is, about the same as the number of women in each draft.
- (2) That small boys, aged 5 to 10 years, be treated at the same time as the men; that they be kept entirely apart from the men and under constant supervision, and in particular, that separate sleeping and lavatory accommodation be arranged.
- (3) That the period of treatment for adults be from one to three months or longer according to the condition of the patient and the numbers available for treatment.
- (4) That admission and discharge of adults be continuous during a period of about four to eight months for each sex, the length of this period to be varied according to the numbers of each sex available at the time.

H. STANLEY BANKS,

Med. Superintendent.

Leicester,

16th September, 1930.

SURGICAL TUBERCULOSIS AND THE ORTHOPÆDIC SCHEME.

During the year important developments and changes occurred in the work of the Orthopædic Department.

It was with great regret that the resignation of the visiting orthopædic surgeon, Mr. R. S. Lawson, F.R.C.S., was received on his promotion to be Surgeon to the Royal Infirmary. Mr. Lawson was succeeded by Mr. Leslie Morris, M.D., F.R.C.S., who holds an appointment on the staff of the Royal National Orthopædic Hospital, London.

Considerable progress was made in the technique of absolute and continuous immobilisation of tuberculous bones and joints by (1) perfecting the design of abduction frames and other splints, (2) improvement in the method of making plaster casts, and the use of the front or "turning" plasters in spine cases, (3) the use of blocks placed in the bed to support frames and plasters so as to permit of nursing work to be carried out without disturbing the patient, and (4) the use of specially designed orthopædic beds with rigid mattresses, large rubber-tyred wheels, &c. Evidence was obtained that hip joint cases, in particular, were progressing more favourably as a result of the improvement in technique, and that relapses did not now occur. It was a great pleasure to see the work in the surgical tuberculosis ward improving so much with the consequent happy and contented spirit among the patients. A contributing factor towards this spirit among the adult patients was the handi-craft work schemes. Fancy leather articles of a high grade were turned out in considerable numbers during 1930. The work among the children was greatly facilitated by the quiet and efficient teaching of Miss Hilda Thurlow, who was appointed teacher to the ward in January, 1930. The Orthopædic Department now consists of:—

- (1) **Ward Block No. IX. with attached verandahs** in which 30 to 35 patients with tuberculosis of bones and joints, chiefly of spine, hip, knee, ankle, foot and shoulder were nursed, immobilised and given sunlight and open-air treatment.
- (2) **Out-Patient Clinic** conducted by Mr. Morris, monthly in the Block, for after-treatment of patients recently discharged; advice on walking splints, arrangements for repairs, &c.
- (3) **Operating Theatre and Plaster Room.**
- (4) **X-Ray Rooms, Ultra-Violet Light Room and Spray Baths, adjoining the Block.**

(5) Workshop for making Splints and appliances.

The whole of the nursing work in this composite department is under the charge of Sister D. H. Dronfield, who has very capably organised her staff and has herself rendered painstaking and highly efficient service.

Ward No. IX.	..	Patients admitted	26 ;	discharged	..	16
Out-Patient Clinic	Cases	..	38 ;	attendances	..	61
Operation Theatre	Major operations	8 ;	minor operations	25		
Plaster Room	..	Plaster Casts	..	..	..	26

Ultra-Violet Light.

(Carbon Arc and Mercury Vapour Lamps.)

Pulmonary Tuberculosis (adults)	..	..	495 treatments.
Do.	(children)	..	.. 457 „
Surgical Tuberculosis	..	..	.. 421 „
Rickets (Out-Patients)	..	..	.. 205 „

X-RAY.

In-Patients.

Radiograms of Lungs	..	..	..	..	448
„	Bones and Joints	..	..	..	109
Screening Chests	..	..	..	..	159
Total (in-patients)					716

Out-Patients.

Radiograms of Lungs (cases from Tuberculosis Dispensary)	..	..	..	..	160
Radiograms of Bones and Joints (cases from School Medical Service Orthopaedic Clinic, &c.)	..	..	..	..	53
Screening (chiefly artificial pneumothorax)	..	..	..	..	90
Total (out-patients)					403

There has been a considerable extension of X-Ray work, particularly in connection with out-patients, both from the Tuberculosis Dispensary (early or doubtful cases) and from the School Clinic.

WORKSHOP FOR SPLINTS AND APPLIANCES.

The work turned out in connection with the Orthopædic Scheme was as follows :—

New Splints, chiefly abduction frames, complete with padding, &c.	17
Repairs and renovations to old splints	171
Dressing Trolleys	3
Straps, pads, restrainers, extension pieces, &c., numerous	

HOSPITAL LABORATORY.

The new Laboratory, Dispensary and Mortuary Block, opened during the year provided first-class accommodation for these services. The amount of work done during the year is shown below :

HOSPITAL LABORATORY.

Total Number of Investigations, 3,279.

BACTERIOLOGY AND PATHOLOGY.

Nature of Specimen.	Result.		
	Number.	Positive.	Negative.
Swabs for Diphtheria—			
(a) from Practitioners	493	87	406
(b) from Hospital Wards	977	205	772
Swabs for Vincent's Angina	54	43	11
Sputum for Tubercle Bacilli	1489	461	1028
Fæces „ „ „	46	5	39
Urine „ „ „	14	3	11
Pleural Fluid „ „ „	63	24	39
Cerebro-Spinal Fluid „ „ „	13	1	12
Cerebro-Spinal Fluid for Meningococci	29	19	10
Sputum for Pneumococci	5	3	2
Vaginal Smears for Gonococcus	3	—	3
Blood for Widal's Test	27	11	16
Urines examined microscopically	287	—	—

HÆMATOLOGY.

Sedimentation Tests	29
Polynuclear Counts	11
Complete Blood Counts	14

BIOCHEMISTRY.

Urea Concentration Tests	3
Blood Sugar Estimations	9

ANIMAL INOCULATION.

	Number.	Positive.	Negative.
Inoculation Tests for Tubercle Bacilli ..	11	5	6
Virulence Tests for Diphtheria ..	46	38	8
Inoculation Tests for Tubercle in Milk (by arrangement with the Chief Sanitary Inspector)	24	—	24
<hr/>			
Post-Mortem Examinations			32

STAFF.

Health.

The illnesses for which removal of members of the staff to the wards was necessary were as follows :—

Acute Tonsillitis	2 nurses.
Scabies	1 nurse.
Purulent Conjunctivitis	1 nurse.
Metrorrhagia	1 nurse.
Erythema Nodosum	1 maid.

The health of the Staff was thus remarkably good. There was no case of Scarlet Fever or Diphtheria amongst the Staff.

Immunisation of Nursing Staff against Diphtheria.

The Schick test was performed on all Probationer Nurses not previously tested, i.e., 18 in number, of whom 10 were found to be positive and were immunised by three weekly injections of toxoid.

BUILDINGS AND EQUIPMENT.

Further alterations and improvements in buildings, equipment and grounds were made in addition to those detailed in the three last annual reports :—

Heating System :—Alterations and adjustments were made in the heating apparatus so as to secure better action of the control valves to each radiator and to eliminate noise from condensation in the piping.

Steam heating was installed in the wooden buildings known as the Training Centre or Ward X. Annexe, and the hot water system in these buildings was linked up to the main supply. The effect

of these changes is to make the cubicles habitable throughout the winter, at the same time abolishing the labour of attending to the coke-fired boiler and stoves. Central heating was installed in the Medical Superintendent's house.

A Steam Kettle and Steam Steriliser were installed in the Diphtheria Ward.

Main Kitchen :—Two large electric ovens were installed additional to the existing gas ranges.

Laundry :—An additional washing machine and hydro extractor, each with separate electric motor, were installed. New porcelain wash tubs were fixed, and the walls behind them tiled.

A ventilating electric fan was installed.

Lighting :—Ward No. IX. was rewired, and the lighting system rearranged so as to provide a portable light over each bed.

Painting :—The Administrative Block, Laundry Block and Ward No. IX. were painted externally, and Ward No. IX. internally.

Poultry Farm :—The scheme described in last year's report was completed by the erection of a third poultry house 30 feet by 12 feet in three sections. The farm as now designed may be used to accommodate 300 laying birds.

Piggeries :—New piggeries were erected giving accommodation for about 30 pigs with the necessary farrowing pens.

Roads :—The tar surface of the main road was completed and side roads were patched and tar-sprayed.

New Building :—The new Laboratory, Dispensary and Mortuary Block and new public conveniences were completed. Porches were erected at the side entrances to the Central Corridor of the Sanatorium Ward, Block No. X.

Ward Equipment :—Further stocks of new beds, bedding and linen, ward lockers and bedside screen, were obtained. The re-furnishing of the wards is now well advanced.

GROUND.

The appearance of the grounds was still further improved. With the aid of the new Greenhouse it was found possible to grow larger stocks of bedding plants. New flower beds were therefore made, with a consequent brightening up of certain dull corners. More patches of rough grass were brought under the motor mower. Numerous patches of smooth lawn now add greatly to the beauty of the surroundings.

H. STANLEY BANKS.

Leicester, 21st May, 1931.

TABLE A.

Number of Patients Admitted, Discharged and Died during 1930.

(As verified after correction of diagnosis.)

DISEASE.	Remaining 31st December, 1929.	Admitted during Year.	Discharged during Year.	Died during Year.	Remaining 31st December, 1930.
Scarlet Fever ..	21	219	222	—	18
Diphtheria ..	43	166	181	6	22
Enteric Fever ..	—	3	3	—	—
Measles ..	—	7	6	1	—
Erysipelas ..	4	18	21	—	1
Cerebro-Spinal Fever ..	—	10	3	6	1
Puerperal Fever ..	—	14	10	3	1
Other Diseases ..	2	143	122	20	3
Smallpox ..	56	1142	1118	1	79
Smallpox Contacts ..	—	72	68	—	4
Tuberculosis :—					
Observation Cases ..	4	64	62	—	6
Adults ..	98	355	332	20	101
Surgical ..	30	26	16	4	36
Children ..	40	79	100	—	19
Discharged Soldiers ..	3	11	10	2	2
	—175	—535	—520	—26	—164
Total ..	301	2329	2274	63	293

TABLE B.

Patient Days.

				For 12 months ending Dec. 31st, 1930.	For 12 months ending March 31st, 1931.
Smallpox	..	..	..	15471	18489
Smallpox Contacts	..	..	..	783	921
Scarlet Fever	..	..	..	6227	5600
Diphtheria	..	..	..	7574	6707
Enteric Fever	..	..	..	170	156
Cerebro-Spinal Meningitis	..	..	..	250	567
Puerperal Fever	..	..	..	437	525
Other Infectious Diseases	..	..	..	1632	1472
Tuberculosis :—					
Adults	..	..	..	40252	39641
Discharged Soldiers	..	..	..	1399	1160
Children	..	..	..	10323	7903
Surgical Cases	..	..	..	11599	12075
Observation Cases	..	..	..	1489	1635
				97606	96851

SUMMARY.

Infectious Diseases	..	..	..	32544	34437
Tuberculosis	..	..	..	65062	62414
Total	..	..	..	97606	96851

TABLE C.

City of Leicester.

ISOLATION HOSPITAL AND SANATORIUM.

Income and Expenditure for the two years ending
31st March, 1931.

EXPENDITURE.

	Year 1929-30.			Year 1930-31.		
	£	s.	d.	£	s.	d.
Salaries and Wages	12155	16	1	12695	15	3
Superannuation : Corporation's Contributions and Additional Allowances	374	13	4	430	13	11
Provisions	8456	0	9	9039	8	10
Drugs, Medical Appliances, &c.	1486	17	7	2556	6	2
Fuel, Light, Water and Power	4915	6	6	4639	1	6
Furniture, Bedding and Linen	1423	10	11	1383	0	4
Crockery and Hardware	233	16	6	179	10	5
Uniforms and Dresses	272	13	5	159	7	9
Cleaning Materials	281	11	11	279	16	9
Laundry Materials	215	18	10	178	19	9
Purchase of Washing Machine .. .. .	..	..	..	495	6	6
Structural Renewals, Repairs and Painting (excluding wages)	3427	13	11	2991	14	0
Grounds, &c. (excluding wages)	387	1	2	372	15	9
Transport (excluding wages)	839	16	6	407	9	1
Printing, Stationery, Postage and Telephone	201	2	5	194	8	3
Rates and Insurance	1545	0	3	1504	2	6
Miscellaneous	407	3	7	394	11	3
Sanatorium School—Salaries, &c.	472	9	11	530	0	7
Occupational Treatment—Wages, Materials, &c.	888	1	0	742	13	3
X-Ray and Light Treatment Supplies	237	14	11	223	7	4
Loan Charges :—						
Interest	1285	7	7	1252	9	8
Repayment of Debt	2345	1	6	1080	7	6
Total Expenditure	£41852	18	7	£41731	6	4
Less Sale of Produce (including supplies from Garden, &c., to Institution) and Miscel- laneous Income	1305	19	1	1488	5	11
Net Expenditure for Maintenance	£40546	19	6	£40243	0	5
Net Expenditure per Patient Day	8	6	..	8	4	..
Income for Maintenance of Patients	404	2	0	681	16	1
Net Cost (including Loan Charges)	£40142	17	6	£39561	4	4
Number of Patient Days	95,449			96,852		

ALFRED RILEY,
City Treasurer.

20th June, 1931.

TABLE D.

As required by the Ministry of Health.

A.—Average Number of Beds Available for Patients during the Year 1930.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
		"Sanatorium" Beds	"Hospital" Beds	Disease of Bones and Joints	Other Conditions	
Adult Males ..	2	30	36	6	..	74
Adult Females ..	2	30	25	6	..	63
Children under 15	1	30	..	15	..	46
Total ..	5	90	61	27	..	183

B.—Return showing the Extent of Residential Treatment during the Year 1930.

			In Institu- tions on Jan. 1	Admitted during the year.	Dis- charged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31
Number of Patients	Adults.	M.	66	220	207	15	64
		F.	49	159	146	9	53
	Child- ren.	M.	27	49	50	1	25
		F.	29	43	55	1	16
Number of Observa- tion Cases	Adults.	M.	3	33	33	..	3
		F.	1	24	25	..	..
	Child- ren.	M.	..	4	3	..	1
		F.	..	3	1	..	2
Total			175	535	520	26	164

TABLE D 1.

As required by the Ministry of Health.

"HOME PLACE," HOLT.

A.—Average Number of Beds Available for Patients during the Year 1930.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints	Other Conditions	
Adult Males
Adult Females
Children under 15
Total	22

B.—Return showing the Extent of Residential Treatment during the Year 1930.

			In Institu- tions on Jan. 1.	Admitted during the year.	Dis- charged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31
Number of Patients	Adults.	M.	..	22	22	..	..
		F.	..	44	44	..	..
	Child- ren.	M.	..	8	8	..	..
		F.	..	24	24	..	..
Number of Observa- tion Cases	Adults.	M.	..	..	..	..	..
		F.	..	..	..	..	..
	Child- ren.	M.	..	..	..	..	..
		F.	..	..	..	..	..
Total	..	..	98	98	..	..

**TABLE E. As required by the Ministry of Health.
Results of Treatment.**

Classification on admission to the Institution.				Duration of Residential Treatment in the Institution.													TOTAL			
				Condition at time of discharge.				Under 3 months.			3-6 months.			6-12 months.				More than 12 months.		
								M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.				Class T.B. minus.			Quiescent	-	1	5	1	2	16	1	-	5	-	-	-	31
							Improved	16	25	15	15	23	47	2	2	11	-	-	1	157
							No material improvement..	2	3	-	-	1	-	-	-	-	-	-	-	6
							Died In Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-
				Class T.B. plus Group 1.			Quiescent	1	-	-	-	-	-	-	-	-	-	-	1	
							Improved	9	8	-	34	20	-	6	3	-	1	-	-	81
							No material improvement..	-	2	-	-	-	-	-	-	-	-	-	-	2
							Died In Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-
				Class T.B. plus Group 2.			Quiescent	1	1	-	1	-	-	2	-	-	-	-	-	5
							Improved	10	6	-	51	11	-	13	9	-	2	-	-	102
							No material improvement..	6	4	-	1	2	-	1	4	-	-	-	-	18
							Died In Institution..	-	-	-	1	-	-	-	-	-	-	-	-	2
				Class T.B. plus Group 3.			Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
							Improved	1	-	-	7	2	-	2	1	-	-	-	-	13
							No material improvement	4	2	-	8	5	-	2	2	-	-	3	-	26
							Died In Institution..	11	4	-	-	2	-	-	2	-	-	1	-	20
				Bones and Joints.			Quiescent or Arrested ..	-	-	1	2	1	-	1	-	-	3	-	3	11
							Improved	-	-	-	-	-	-	-	-	-	-	-	-	-
							No material improvement..	-	-	-	-	-	-	2	-	1	-	-	3	
							Died In Institution..	-	-	2	-	-	-	1	-	-	1	-	-	4
				Abdominal.			Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-
							Improved	-	-	-	-	-	-	-	-	-	-	-	-	-
							No material improvement..	-	-	-	-	-	-	-	-	-	-	-	-	-
							Died In Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Organs			Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-				
			Improved	-	-	-	-	1	1	-	-	-	-	-	2					
			No material improvement..	-	-	-	-	-	-	-	-	-	-	-	-	-				
			Died In Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-				
Peripheral Glands.			Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-				
			Improved	-	-	-	-	-	-	-	-	-	-	-	-	-				
			No material improvement..	-	-	-	-	-	-	-	-	-	-	-	-	-				
			Died In Institution..	-	-	-	-	-	-	-	-	-	-	-	-	484				
Observation for purpose of diagnosis.				Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.							
				Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.							
				Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.							
				Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.							
Tuberculous..	..	..	..	6	8	-	11	4	-	4	3	-	4	2	-	42				
Non-tuberculous	..	..	..	1	-	-	-	1	1	-	-	-	2	2	3	10				
Doubtful	..	..	..	-	1	-	1	1	-	-	-	-	4	3	-	10				
																	546			

TABLE E 1. As required by the Ministry of Health.
"HOME PLACE," HOLT.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL.	
		Under 3 months.			3-6 months.			6-12 months.			More than months.				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent	-	-	5	-	-	-	-	-	-	-	-	-	5
	Improved	5	18	27	-	-	-	-	-	-	-	-	-	-	50
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Class T.B. plus Group 1.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	8	13	-	-	-	-	-	-	-	-	-	-	-	21
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Class T.B. plus Group 2.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	8	12	-	-	-	-	-	-	-	-	-	-	-	20
	No material improvement ..	1	-	-	-	-	-	-	-	-	-	-	-	-	1
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Class T.B. plus Group 3.	Quiescent	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Abdominal.	Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other Organs.	Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Peripheral Glands.	Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improved	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No material improvement ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	98
Observation for purpose of diagnosis.			Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.			
	Tuberulous	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Non-tuberulous	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Doubtful	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Report on the City General Hospital, Leicester,

For the Nine Months ending December 31st, 1930.

By ERNEST C. HADLEY, M.D., B.S. (Lond.), F.R.C.S.E., &c.,
Medical Superintendent.

This hospital, which was opened for the reception of patients on September 28th, 1905, was "appropriated" by the Health Committee of the Leicester City Council under the Public Health Acts, 1575 to 1926, as extended by Section 14 (2) of the Local Government Act, 1929, on April 1st, 1930, which was the "appointed day" under the new Act, from which date the hospital was re-named the City General Hospital.

The mode of admission and conditions of eligibility for treatment were altered as from that date, suitable cases being accepted at the discretion of the Medical Superintendent on the recommendation of the patient's own doctor, a condition of admission being that the patient is usually resident within the City of Leicester.

It is important to realise that the hospital on that date ceased to be a Poor Law Institution.

General Features of the Hospital.

The hospital is situated on a site comprising approximately 108 acres, 29 acres of which have been acquired during the last few months. It is 336.55 feet above sea level, the highest point on this side of the valley in which Leicester lies ; for example, Leicester Market is 207 feet, Victoria Park 290 feet, and Spinney Hill Park 262 feet respectively above sea level.

The original site of 62 acres cost £6,920 and the buildings £79,575. The hospital consists of four two-storey Pavilions each containing four wards or units.

The Large Wards, 16 in number, are 88 feet 6 in. long, 24 feet wide and 12 feet high, having a cubical space of 25,488 feet and contain 28 beds, giving a cubical space for each patient of 910 $\frac{2}{3}$ feet.

Heating and Ventilation :—These wards are heated by two central open fire stoves and four wall radiators with one central radiator.

Inlets and outlets are provided by means of Tobin tube ventilators and Leggot's hopper fanlight openers, and ventilators behind the radiators, also exit flues, &c.

Sanitary Arrangements :—Each large ward is provided with a sanitary annexe which can be entered either from the ward or the corridor, and is so arranged that it is entirely cut off from the building by a lobby and closed doors with ample cross draught for ventilation.

Bath Rooms :—In each corridor, between the large ward and the main corridor, there is a bathroom fitted with two baths.

Lavatory :—In this corridor is also a lavatory with five basins.

Linen Stores :—There are two Linen Stores to each ward fitted up with shelves and cupboard.

Side Wards and Balcony Beds :—Each large ward has adjacent to it a Three-bedded Ward 19 ft. 6 ins. by 15 ft. by 12 ft., and a Single-bedded Ward 14 ft. by 10 ft. 6 ins. by 12 ft. ; also four balcony beds.

Ward Kitchens :—Adjacent to the large ward is a Ward Kitchen and Pantry which has observation windows so that nurses can have an oversight of their patients when working in this room.

Heating and Lighting :—The whole building is heated on the low pressure steam principle and lighted by electric light provided by the Leicester City Electricity Department ; gas is also laid on to serve as a standby in case of failure of the electric light.

The Laundry :—All the washing required by the hospital is done in the Steam Laundry which is fitted with soap boilers, washing machines, hydro extractors, callenders, drying horses and washing troughs, &c.

The Boiler House :—The Boiler House is fitted up with two Lancashire boilers, each 28 ft. by 7 ft. 6 ins., and adjacent to the boiler house is an engineer's shop, pump room, switch room, economiser, and incinerator, painters' shop and carpenters' shop and fire escape house. Water is heated by means of Calorifiers, one for each pavilion and one for the administrative buildings, which are placed in the main subway.

The Tower :—The Tower which surrounds the main chimney stack is used for the storage of water and other purposes.

The total height of the Tower is 130 feet. The height of the bottom of the tank from the ground is 90 feet. The octagonal tank, made of cast iron, holds 24,000 gallons.

Water :—Water is obtained from the City of Leicester Corporation, and in addition soft water from the roofs of the building collected in an underground tank which is capable of holding 50,000 gallons of water which is used for laundry purposes.

The Maternity Hospital is situated on the East side of the Infirmary at a distance of about 300 yards. It contains two wards of four beds each, a labour room and ward kitchen, and bedrooms for a Sister and a Pupil Midwife.

The iron fence which surrounds 78 acres of the site is 3,333 yards long and 6 feet high.

The New Nurses' Dormy House (extension of Nurses' quarters) :—This building was erected on an open site to the North-East of the main building and, opened in 1926, it provides an additional 36 separate bedrooms for nurses ; also a lounge and quiet room. This building was planned to allow of future extension.

The building is of three storeys and is in striking contrast to the rest of the hospital. It is heated by means of hot-water radiators.

Subway :—A spacious subway extends from one end of the hospital building to the other under the main corridor, which is 600 feet long, and branch subways pass under each of the wards, so that easy access can be obtained to all pipes, cables, &c.

The hospital, of course, is also equipped with all that is necessary for the treatment of every kind of complaint, by way of Operating Theatre, X-Ray Room, Sterilizing Room, Clinical Laboratory, Post-Mortem Room, &c.

The number of beds provided at this hospital are :—

Men	..	..	..	..	272
Women and Children			..	..	273
					<hr/>
Total	..		..		545
					<hr/>

The average number of beds occupied during the last nine months has been 432. The highest number, 483 ; the lowest number, 375.

Number of patients admitted for in-patient treatment	..	1,772
Number of deaths and discharges	.. ..	1,830
Average stay of patients	.. ..	32.7 days.
Number of patient days	.. ..	69,878 days.
Number of confinements	.. ..	92
Number of operations performed	.. ..	108
Number of X-Ray films taken	.. ..	385

CLASSIFICATION OF CASES TREATED DURING THE PAST NINE MONTHS.

MEDICAL CASES.

I. General Infections.

Chorea, rheumatic	10	Rheumatic Fever	44
Influenza	21	Scarlet Fever	1
Lobar Pneumonia	22	Septicæmia	2
Pertussis	19	Varicella	5
Malaria	1	Variola	9
Measles	14		

II. Digestive System.

Dyspepsia	6	Colitis	6
Gastritis, acute	7	Diarrhœa	4
„ chronic	4	Dysentery	2
Gastroptosis	1	Stasis	7
Pylorus Stenosis (cong.)	1	Catarrhal Jaundice	1
Gastro-enteritis, acute	7	Cirrhosis of the Liver	5
„ chronic	30	Pneumococcic Peritonitis	2

III. Disorders of Metabolism.

Diabetes Mellitus	15	Myxoedema	1
Gout	3	Cretinism	1
Decum's Disease	1	Goitres	3
Diabetes Insipidus	1		

IV. Children's Diseases.

Convulsions	10	Gastro-enteritis	30
Acidosis	1	Errors of Diet	8
Dentition	1	Prematurity	4

V. Diseases of Heart and Circulatory System.

Fatty Degeneration	3	Angina Pectoris	3
Endocarditis, various	35	Arterio-sclerosis	15
Pericarditis	3	Atheroma	30
Myocarditis	43	Auricular Fibrillation	14
Aneurysm	3	Hyperiesis	10

VI. Diseases of the Nervous System.

Tuberculous Meningitis	2	Disseminated Sclerosis	5
Encephalitis Lethargica	10	G.P.I.	4
Epilepsy	54	Paralysis Agitans	3
Cerebral Hæmorrhage	22	Paraplegia	3
„ Thrombosis	50	Polio-encephalitis	1
„ Embolism	2	Progressive Muscular Atrophy	2
„ Congestion	3	Tabes Dorsalis	2
„ Claudication	1		

VII. Mental.

Dementia	7	Melancholia	6
Imbecility	4	Neurasthenia	47
Insanity	36	Psychasthenia	3
Hysteria	3	Suicidal	8

VIII. Bones, Joints, Fibrous Tissue.

Lumbago	16	Osteo-arthritis	3
Rickets	3		

IX. Respiratory.

Asthma	4	Collapse of Lung	1
Bronchiectasis	2	Fibrosis of Lung	2
Bronchitis, acute	48	Capillary Bronchitis	3
„ chronic	76	Phthisis	120
Broncho-pneumonia	29	Pleurisy	17

X. Kidney Diseases, &c.

Nephritis, acute	7	Renal Syphilis	3
„ Chronic Parenchymatous	4	Uræmia	5
„ Chronic Interstitial	12	Cystitis	10
Renal Glycosuria	1		

XI. Intoxications.

Alcoholism, acute	4	Delirium Tremens	6
„ chronic	15	Lead Poisoning	1

XII. Skin Diseases.

Eczema	9	Ringworm	24
Scabies	2	Erysipelas	12
Psoriasis	3	Alopecia Areata	1
Furunculosis	11	Dermatitis	10

XIII. Blood Diseases.

Anæmia	5	Erythema Pernio	3
Pernicious Anæmia	3		

SURGICAL DISEASES.

I. Alimentary System.

Gastric Ulcer	10	Tuberculous Peritonitis	1
Gastric Carcinoma	7	Proplapsus Recti	3
Duodenal Ulcer	3	Hæmorrhoids	6
Appendicitis	7	Herniæ	15
Acute Intestinal Obstruction	4	Gall Stones	4
Carcinoma Coli	6	Cyst of Liver	1
Tuberculous Enteritis	3	Sub-diaphragmatic Abscess	1

II. Genito Urinary System.

Balanitis	1	Stricture of Urethra	2
Cystitis	6	Varicocele	1
Cystic degeneration of Kidney	1	Phimosis	8
Enlarged Prostate	18	Syphilis	138
Pyelitis	2	Gonorrhœa	8
Stone in Kidney	3	Soft Sores	1
Hypernephroma	1		

III. Mouth and Throat and Teeth and Ears.

Extractions	12	Tonsils and Adenoids	38
Cancrum Oris	1	Otitis Media	9
Glands of Neck	11		

IV. Bones and Joints.

Fractures	54	Deformities	4
Dislocations	5	Tuberculous Joints	10
Sprains	14	Spinal Caries	3
Contusions and bruises	12	Acute Osteo-myclitis	2

V. Respiratory.

Empyema	2
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VI. Brain.

Concussion of the Brain	8	Cerebral Syphilis	18
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VII. Gynæcological and Maternity.

Confinements	98	Mastitis	7
Placenta Prævia	5	Carcinoma of Breast	8
Abortions	5	Ovarian Cyst	3
Ante-partum Hæmorrhage	6	Salpingitis	3
Post-partum Hæmorrhage	6	Uterine Fibromata	1
Hyperemesis	6	Hysteroptosis	2
Hydatidiform Mole	1	Carcinoma Uteri	10
Eclampsia	2	Carcinoma of Ovary	1
Retained Placenta	1	Menstrual Disorders	8
Rachitic Pelvis	1	Epithelioma Vulvæ	1

VIII. Tumours, various situations.

Malignant	70	Simple	5
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CAUSES OF DEATHS—Nine months, April 1st, 1930, to December 31st, 1930.

I. Alimentary System and Nutritional Diseases.

Gastro-enteritis	6	Acidosis	1
Tuberculous Peritonitis	2	Diabetes Mellitus	6
Cirrhosis of Liver	4	Cancrum Oris	1
Volvulus	1		—
Congenital Pyloric Stenosis	1		22

II. Respiratory System.

Bronchitis, chronic	8	Phthisis	34
„ acute	2	Collapse of Lung	1
Pneumonia, Lobar	9		—
„ Broncho-	11		65

III. Circulatory System.

Valvular Disease	9	Aortic Aneurysm	2
Auricular Fibrillation	8	Pernicious Anæmia	1
Pericarditis	1		—
Myocarditis	11		32

IV. Nervous System.

Epilepsy	2	Tabes Dorsalis	3
Cerebral Syphilis	1	Encephalitis	4
Disseminated Sclerosis	2		—
Infantile Convulsions	2		14

V. Bones and Joints and Deformities.

Rheumatoid Arthritis	3	Cleft Palate	1
Fractured Ribs	1		—
Fractured Femur	15		20

VI. Senile Decay and Degenerative Senile Changes.

Senile Decay	58	Enlarged Prostate	5
Cerebral Thrombosis	17	Senile Gangrene	3
Cerebral Haemorrhage	11		—
Arterio-Sclerosis	4		104
Coronary Atheroma	6		

VII. Genito-Urinary System.

Nephritis, chronic	10	Uræmia, acute	2
„ acute	2		—
Uræmia, chronic	8		22

VIII. Miscellaneous.

Alcoholism, chronic	4	Sunstroke	1
„ acute	2	Insufficient Vitality at Birth	3
Lead Poisoning	1		—
Erysipelas of Face	1		12

IX. Malignant Growths.

Carcinoma—		Carcinoma—	
Lips and Cheeks	3	Corpus Uteri	4
Oesophagus	1	Pancreas	4
Face	1	Liver	1
Tonsils	1	Vagina	1
Palate	2	Lungs	1
Tongue	2	Kidney	1
Larynx	1		
Stomach	6	Sarcoma	
Rectum	6	Ischium	1
Bladder	2	Lympho-Sarcomatosis	1
Prostate	1	Congenital Hypernephroma	1
Breast	8		—
Cervix Uteri	4		53

Total Deaths 344

Inquests 19

CITY OF LEICESTER.

CITY GENERAL HOSPITAL.

Income and Expenditure for the year ending 31st March, 1931.

EXPENDITURE.						£	s.	d.
Salaries and Wages :—								
Medical Staff	..	..	..	..	..	1563	5	0
Nursing Staff	..	..	..	..	..	5490	0	2
Other Staff	..	..	..	..	..	5525	8	8
Corporation's Contributions to Superannuation Fund under								
Act of 1922	..	..	..	..	..	367	5	7
Superannuation Allowances under Act of 1896	..	..	..	..	..	342	16	9
National Insurance	..	..	..	..	..	292	12	7
Provisions :—								
Staff	..	..	..	..	..	3730	13	10
Patients	..	..	..	..	..	7860	14	1
Clothing :—								
Staff	..	..	..	..	..	275	4	4
Patients	..	..	..	..	..	468	16	1
Drugs and Medical Appliances	..	..	..	..	..	2133	11	1
Fuel, Light and Water	..	..	..	..	..	4110	8	5
Laundry :—Wages and Materials	..	..	..	..	..	1446	13	11
Furniture and Fixtures	..	..	..	..	..	1032	14	2
Hardware and Crockery	..	..	..	..	..	324	19	9
Bedding and Linen	..	..	..	..	..	652	14	1
Cleaning Materials	..	..	..	..	..	516	4	8
Disinfectants	..	..	..	..	..	25	10	10
Education and Training Sundries	..	..	..	..	..	78	15	10
Buildings, Plant and Machinery :—								
Additions and Alterations	..	..	..	..	..	248	8	7
Renewals and Repairs	..	..	..	..	..	903	0	1
Painting and Decorating	..	..	..	..	..	466	16	11
Maintenance of Grounds	..	..	..	..	..	734	8	2
Removal of Patients	..	..	..	..	..	232	17	0
Travelling Expenses	..	..	..	..	..	534	2	11
Other Transport	..	..	..	..	..
Printing and Stationery	..	..	..	..	..	351	15	6
Telephone	..	..	..	..	..	129	9	9
Funerals	..	..	..	..	..	8	6	0
Sundries	..	..	..	..	..	203	11	11
Rates	..	..	..	..	..	2619	16	10
Insurance : Fire, &c.	..	..	..	..	..	78	8	3
Disposal of Sewage	..	..	..	..	..	131	10	0
Farm and Garden	..	..	..	..	..	550	13	4
Loan Charges :—								
Interest	..	..	..	..	..	987	8	10
Repayment of Debt	..	..	..	..	..	3870	7	6
Total Expenditure						£48289	11	5

INCOME.							£	s.	d.	
Deductions for Superannuation under Act of 1896							18	10	5	
Sundries	..	..	..	..	..	71	13	1		
								90	3	6
Net Expenditure for Maintenance				£48199	7	11
Net Expenditure per Patient Day					6	1
Income for Maintenance :—										
Mental Deficiency Committee				870	2	6
Other Local Authorities				265	10	1
Relatives and Patients				3113	3	10
Ministry of Pensions for Treatment of Ex-Servicemen				23	15	4
								£4272	11	9
Net Cost (including Loan Charges)				£43926	16	2
Number of Patient Days					158,321	

ALFRED RILEY,
City Treasurer.

20th June, 1931.

Maternity and Child Welfare.

By E. B. BERENICE HUMPHREYS, M.B., Ch.B., Edin.,
Maternity and Child Welfare Medical Officer.

The statutory Maternity and Child Welfare Committee (appointed under the provisions of The Maternity and Child Welfare Act, 1918), consists, in Leicester, of the full Health Committee, together with four co-opted members. Actually the work is carried out by a Sub-Committee of ten members of the Health Committee (together with the four co-opted members), which meets each month. When the minutes of this Sub-committee are submitted to the Health Committee for confirmation, the co-opted members are invited to be present.

It will be convenient to refer to the work of the Department under the following headings:—

- Health Visitors.
- Schools for Mothers and Infant Welfare Centres.
- Infants' Milk Depot and Highcross Street Centre.
- Ante-natal Clinics.
- Dental Clinic.
- Municipal Maternity Home.
- Day Nursery.
- Midwives.
- Registered Nursing Homes (including Maternity Homes).
- Assistance in Necessitous Maternity Cases.
- Local Government Act, 1929.
- Orthopædic and Light Department.
- Birth Control Clinic.
- Puerperal Pyrexia and Puerperal Fever.
- Maternal Mortality.
- Staff.

Health Visitors.

There are thirteen District Health Visitors (one part time), with Mrs. Reed as Superintendent Health Visitor, and their names and qualifications are set out on page vi.

The duties of the Health Visitors comprise their work on the district and at the Infant Welfare Centres. Each Health Visitor has a district and is responsible for the home visiting in all cases of children under five years of age. Infants whose births are notified are visited as soon as possible after the tenth day in the cases notified by midwives, and after the fourteenth day in cases where a doctor is in charge of the case. Thereafter the Health Visitor revisits approximately once a month, according to the circumstances and conditions which she finds on her first visit. Every effort is being made to obtain a continuous record, up to the age of five years, of all children, once their existence has been notified to the Department. This often necessitates many visits and much time in tracing children who do not remain long at one address.

The following is a statistical report on the work done by the Health Visitors during 1930 :—

The corresponding figures for 1929 are shown in brackets.			
Number of first visits to infants	..	3,599	(3,438)
„ revisits to children under one year old .. ..	.. ..	13,103	(16,118)
„ visits to cases of Ophthalmia Neonatorum .. ..	.. ..	135	(165)
„ visits to children one to five years old .. ..	.. ..	4,968	(2,822)
„ visits to ante-natal cases ..	..	614	(920)
„ other visits .. ..	.. ..	5,546	(4,872)
Attendances of Health Visitors at Schools for Mothers and Infant Welfare Centres			
		918	(850)
Attendances of Health Visitors at Ante- natal Clinics			
		82	(62)

The work of the Health Visitors at the Schools for Mothers and Infant Welfare Centres is dealt with under that heading.

SCHOOLS FOR MOTHERS AND INFANT WELFARE CENTRES.

A new Centre was opened at St. Christopher's Church, Saffron Lane, and the first session was held on April 3rd. The President

is Miss Fletcher, who had been a voluntary worker at the Wellington Street Centre for a number of years. The weekly attendances, though not large, are being maintained and the Centre is doing good work amongst the mothers on the Saffron Lane Estate.

Notice was received during the autumn that the premises in Wellington Street would no longer be available for the purpose of an Infant Welfare Centre and the last session was held there on 16th December. The work was transferred to the new premises for the Milk Depot, 18 King Street, where a clinic is held each Tuesday afternoon for mothers belonging to the Wellington Street district.

Uppingham Road School for Mothers.—Mrs. Cuffin, who succeeded Mrs. Councillor Swainston as President at this School, was compelled to resign, owing to ill-health, and her place has been taken by Mrs. Flint.

Curzon Street School for Mothers.—Mrs. Turner was reluctantly compelled to relinquish the presidency of this School, after 10 years of service, owing to pressure of other work. She is succeeded by Mrs. Mantle, who is also President of Belgrave Hall School for Mothers.

There are sixteen Centres in Leicester (and also the Infants' Milk Depot) at which mothers may attend and bring their children under five years of age, and a complete list of the Centres is set out below :—

Name.		President.	Day of Meeting.
Western Road	..	.. Mrs. Beale	Monday
Curzon Street	..	.. Mrs. Mantle	"
Clipstone Street	..	.. Mrs. Banks	"
Aylestone Road	..	.. Miss Windley	Tuesday
Bedford Street	..	.. Mrs. Millard	"
18 King Street	..	.. ———	"
Wesley Hall	..	.. Mrs. Taylor	"
Cavendish Road	..	.. Mrs. Johnson	"
Justice Street	..	.. { Miss Went Mrs. Bouskell }	Wednesday
Uppingham Road	..	.. Mrs. Flint	"
Fosse Road	..	.. Mrs. Gibbs	"
Coleman Road	..	.. Mrs. Herbert	"
Belgrave Hall	..	.. Mrs. Mantle	Thursday
Clarendon Park	..	.. Miss Partridge	"
Highcross Street Centre	..	.. Mrs. Viccars	"

The total number of sessions held during the year was 741, and the total attendances of mothers was 37,115.

A session is held each week. There is a doctor in attendance at each Centre to give advice, free of charge, to the mother about herself and her child. All cases see the doctor on their first visit, and thereafter as occasion demands. Efforts are made to ensure that all children—the babies, the ex-babies and the toddlers—are brought to the notice of the doctor at regular intervals for general supervision so that defects may be prevented, or discovered at an early age, and appropriate treatment recommended. Mothers are willing and usually anxious for the doctor to see their child while it is under one year old, but after that age it is difficult to convince many of them of the value of regular medical supervision of the child, which to them appears to be thriving. The advent of another baby may be responsible, in some cases, for this overlooking of the toddler. As far as accommodation permits, each Centre has a room set apart as a Nursery where mothers may leave their toddlers in the care of one or more Voluntary Workers, who keep these children happy and occupied. This arrangement serves the two-fold purpose of training the toddlers to leave their mothers and also affords relief for the mother, during which she may give her whole attention to the activities of the Centre and so derive the maximum benefit therefrom.

The following medical practitioners conduct the medical consultations at the various Infant Welfare Centres each week :—

Dr. F. Armitage, Dr. Gertrude Austin, Dr. Lucy Simpson Davies, Dr. Moffatt Holmes, Dr. Catherine Mitchell and Dr. P. E. Snoad. Dr. E. Gordon Lawrie, the Assistant Tuberculosis Officer, attends at four Centres, and the Maternity and Child Welfare Officer at one Centre and at the Infants' Milk Depot each week for the same purpose.

A Health Visitor is attached to each Infant Welfare Centre and, as far as possible, her district work is in the neighbourhood of the Centre which she attends. This arrangement is important to ensure the continuity of the work done in the district and at the Infant Welfare Centre. It is largely through the home visiting of the Health Visitor that the work of the Infant Welfare Centre is made known to new mothers, and the Health Visitor's knowledge of the home conditions of her cases should be available for the doctor at the Centre. Similarly, the Health Visitor should be in close touch with the doctor to ensure that the medical advice given at the Centre is carried out.

In addition to the medical consultations, much useful work in the teaching of the various branches of Mothercraft is carried out at the Centres. In the matter of suitable clothing of children under five years of age, much good work is being done. The display at each Centre of a set of model garments, suitable in design and material for the baby and the toddler, with similar garments which may be purchased or, better still, patterns from which the mother herself can make the garments, constitutes an important branch of Mothercraft which is being emphasised at the Centres.

At each Centre a "talk" is given at fortnightly intervals on a subject which should be definitely helpful to the mothers. The syllabus includes Ante-natal supervision, the nursing mother, breast feeding and artificial feeding of infants, general management of the baby and toddler, &c. The majority of these "talks" are given by Mrs. Reed—the Superintendent Health Visitor—and by Nurse Prior, who is attached to the Department as a part-time official in this capacity. At Highcross Street Centre and occasionally at some of the other Centres, the Health Visitor attached to the Centre gives the fortnightly "talk."

There are two Infant Welfare Centres which differ from the others in that the premises are permanently rented by the Corporation and are open daily. These are the Infants' Milk Depot and the Highcross Street Infant Welfare Centre.

1.—The Infants' Milk Depot was opened in Belgrave Gate in 1906 but the premises, in which the work has been carried on continuously since that date, are to be demolished in connection with the street-widening scheme. The work of the Milk Depot was transferred to premises at 18 King Street in October. The premises are now fully equipped to serve as a Consultation Centre, and four clinical sessions are held there each week.

Mrs. Stanion continues as manageress and there are now two assistants for the routine work in connection with the sale of dried milk. It is the Central Depot for the distribution and sale of dried milk.

The premises are open throughout the day and mothers may attend at any time to have their babies weighed and to receive advice from Mrs. Stanion. The Maternity and Child Welfare Medical Officer conducts a clinic on Monday mornings for those children attending the Milk Depot.

The number of fresh cases of infants brought to the Depot during the year 1930 was 612. The total number of consultation clinics held during the year was 85 and the total attendances 1,234 (as compared with 1,358, 1,351, 1,158 and 1,151 in the five previous years). For a period, while the new premises were being adapted, it was not possible to hold the weekly clinics, but this work is now thoroughly re-established.

In addition, there was an attendance of 5,249 infants brought to be weighed, apart from the clinics.

2.—Highcross Street Infant Welfare Centre. These premises comprise a three-storey house of eight rooms, five of which are actually in use daily. A Health Visitor is always in attendance and mothers may attend at any time to obtain dried milk, to receive advice about their children or themselves in relation to their children, or to have their babies and toddlers weighed. A medical consultation is held on Thursday afternoons and a fortnightly " talk " to mothers is given on Tuesday afternoons by the Health Visitor. For a period a fortnightly dressmaking class has been arranged by the President of this Infant Welfare Centre. In addition to these activities, a conveniently designed window in the front room of the ground floor for the display of diagrams and pictures and model babies and toddlers, suitably clothed, affords a silent but useful aid to the Mothercraft taught at this Centre. The details of the work for 1930, expressed numerically, are as follows :—

Number of new cases	..	..	..	189
Attendances of children under one year old	..			2,629
Attendances of children aged 1 to 5 years	..			315
Number of clinics held	..	..	..	49
Attendances at clinics	..	..	..	1,757

Ante-natal Clinics.

There are three municipal clinics for the expectant mother, viz. : The City of Leicester Maternity Home, Westcotes Drive (Friday morning and afternoon), for those women who have booked their confinement at this Home ; The Infants' Milk Depot (Tuesday morning), and Highcross Street Centre (Wednesday morning). The medical work at these clinics is carried out by the Maternity and Child Welfare Medical Officer. The women who attend include :—

1. Those who come independently, or are referred by a Health Visitor and have not made arrangements concerning their confinement. They continue to attend the clinic until such arrangements are made, when details of their case are sent to the person booked to attend the confinement, and with whom arrangements are made as to subsequent attendance at the clinic.

2. Those who are referred to the clinic by midwives. The Central Midwives Board has set up a certain standard of ante-natal work for midwives which some of them are not competent to attain and they are therefore being urged to utilise the facilities of the ante-natal clinic. Further, while a competent midwife is able to carry out the supervision according to the standard of the Central Midwives' Board and so form an opinion of her patient in relation to child-bearing, she is not in a position to judge of the woman's general health. This is an essential consideration in connection with child-bearing, and at least one medical examination is necessary in all cases. The ante-natal clinic affords this facility for those cases for whom no doctor is booked and midwives are slowly availing themselves of this.

With the patient's consent, a written medical report is sent to the midwife after the first consultation and later when any abnormality is discovered.

3. Those who are sent by medical practitioners. Occasionally, a doctor sends his own cases to the ante-natal clinic for examination, and the same procedure is carried out in the matter of medical reports.

From time to time expectant mothers who have definitely engaged a doctor to attend them present themselves at the ante-natal clinic. The irregularity of this procedure is pointed out to them and they are informed that they cannot attend unless the doctor who has been engaged expressly wishes this.

In addition to the routine medical examination at the ante-natal clinics, their educational value is an important consideration. The clinics serve as training centres for pupil midwives, and for those midwives, already practising, who are not competent to carry out the ante-natal supervision now required of them by the Central Midwives' Board.

Further, the very existence of an ante-natal clinic serves to indicate to women that they need definite and skilled supervision during their pregnancy. The clinics should cause them to seek

advice, and to seek it earlier than has been the custom hitherto, whether they go to a clinic, to their own doctor, or to a midwife.

The ante-natal clinics provide excellent opportunity for teaching of Mothercraft. The expectant mother may receive guidance as to the most hygienic outfit for her baby ; she may see models and obtain patterns and directions as to the making thereof. The ante-natal period is a time when the mother is anxious to learn and the preparation of baby clothing, on rational lines, affords her suitable and profitable employment at a time when, if left too much to herself, she is likely to become introspective. Again, the ante-natal period is obviously the time when the subject of breast-feeding should be emphasised and the clinic affords excellent opportunity to educate those women who, early in their pregnancy, have some prejudice against suckling their child, and to encourage and supervise those women who are anxious to breast-feed. I am confident that much of the hard teaching at the Infant Welfare Centres would be simplified, and in some cases be rendered unnecessary if women could only be convinced, long before the baby is born, that breast-feeding is practicable in the majority of cases.

The number of ante-natal clinic sessions held and the attendances during 1930 were as follows :—

			No. of Sessions.	No. of Attendances.	
				New cases.	Old Cases.
Milk Depot	..	..	30	60	54
Highcross Street	..	..	50	149	163
Maternity Home	..	..	100	388	1044

Maternity and Child Welfare Dental Clinic.

This clinic has been open since November, 1924, and the arrangement then made with the School Dental Service still continues. One of the School Dental Surgeons sets aside one afternoon session in each week for expectant and nursing mothers and children under five years of age for whom dental treatment is recommended by the doctors at the ante-natal clinic and Infant Welfare Centre. The Health Department pays the Education Department for the services rendered according to agreement, the payment covering the salary of the dentist, appliances, material, &c. Dentures are made by outside dental artificers, but are fitted by the dentist at the clinic. Charges are calculated on the basis agreed upon by the Dental Profession for patients insured under the National Health Insurance Act. The patient pays half the charge and the balance,

representing the difference between patients' payments and the cost of the clinic, falls on the Maternity and Child Welfare Committee.

The following are the figures for 1930 :—

- 45 Clinic Sessions were held.
- 101 New Cases attended.
- 288 Attendances were made.
- 81 Cases completed treatment.
- 15 Dentures were supplied.
- 4 Dentures were repaired.
- 309 Extractions of Permanent Teeth.
- 52 Extractions of Temporary Teeth.
- 123 Local Anæsthetics were given.
- 7 Cases received " gas " anæsthesia.
- 27 Fillings were done.
- 5 Scalings were done.
- 70 Prostetic and other dressings were made.

Municipal Maternity Home.

The Municipal Maternity Home, situated in Westcotes Drive, was opened in August, 1920, having been converted from a large private mansion which was acquired for the purpose. It stands in its own beautiful grounds, and is away from noisy traffic. It provides accommodation for 26 beds, together with one isolation bed. The number of confinements in the Home each year has been as follows :—

1920 (five months only)	..	139
1921 .. ..	..	339
1922 .. ..	..	345
1923 .. ..	..	394
1924 .. ..	..	444
1925 .. ..	..	438
1926 .. ..	..	455
1927 .. ..	..	445
1928 .. ..	..	515
1929 .. ..	..	504
1930 .. ..	..	475

It will be seen that the number of cases admitted during 1930 falls short of the figures for the last two years, which were the highest since the Home was opened. This decrease is probably due to the fact that in May, 1930, the Maternity Home Sub-Committee resolved to decline to book cases which were resident outside the city boundary. (County cases which were already booked at this date were, of course, admitted for their confinement.) It is too soon to judge of the result of this exclusion of cases, but when it is noted that 90 of the cases admitted in 1929 were resident outside the city and that 27 were from the Corporation Housing Estates beyond the city boundary, the apparent decrease in 1930 is not really great.

The ante-natal clinic for women who have booked to have their confinement in the Municipal Maternity Home is held on the premises for two sessions in each week (Friday morning and afternoon). The accommodation available for this clinic comprises a waiting room and an improvised examination room and is inadequate and inconvenient for the patients and staff concerned with the clinic, and for the indoor nursing staff of the Home. Some relief is afforded by the drafting of certain suitable cases to the ante-natal clinics held elsewhere in the city.

A tabular statement of the work done at the Home is given in Table 17 and a financial statement in Table 18.

Staff.—Dr. T. W. Allen continues as the Medical Officer on call for the Maternity Home and Miss E. Bradshaw as Matron.

Training of Midwives.—The Municipal Maternity Home is an approved Training School for pupil midwives and during the year 10 general trained nurses and 3 untrained persons were accepted for training. One pupil midwife was still in training at the end of the year. The remaining 12 completed their training and successfully passed the examination for the certificate of the Central Midwives' Board.

Midwifery Lectures for Pupil Midwives.—There are three institutions in Leicester which are recognised by the Central Midwives' Board as training schools for pupil midwives, viz., The Municipal Maternity Home, The Leicester and Leicestershire Maternity Hospital, and The City General Hospital (formerly North Evington Poor Law Infirmary). Following the decision of the Central Midwives' Board, the three separate lecture courses for pupil midwives have been combined since 1928 into one course, which the pupils from the different institutions attend. The

arrangement with the University College, which made this practicable, still continues. A special committee was appointed by that body, composed of representatives of the College, together with the Medical Officers of the Institutions. Dr. Astley Clarke, a member of the College Board of Governors, was appointed Chairman, and the Medical Officer of Health was appointed Honorary Secretary. Income is derived from the fees of the pupils attending the courses, and out of the funds so obtained all expenses, including lecturers' fees, have to be paid. The University College made it a condition that under no circumstances would they be responsible for any expense.

Two courses, each of 30 lectures, are held each year, half being given at one institution and half at the other. The curriculum is divided into two halves, each of the two lecturers taking a half. One lecture at the close of each course, dealing with the relationship of the midwife to the local supervising authority, is given by the Medical Officer of Health.

Day Nursery.

The Corporation took over the work of the Leicester Day Nursery Society in July, 1920, and the work of the two old day nurseries was transferred in February, 1923, to the present premises (formerly St. Martin's Vicarage) in St. Martin's Lane.

Mothers who are obliged to go to work and who would have difficulty in finding a suitable daily nurse woman, may leave their children, up to five years of age, under skilled supervision and healthy conditions throughout the day for a nominal charge. The house provides excellent accommodation for the nurseries and for the staff. The rooms are light and airy, and the open-air playground, with its sand pit, is a great asset to the nursery and a joy to the children. Except in very severe weather, it is possible to accommodate all the children out of doors in the playground, the older children happy at their games and the babies, suitably clad, in the cots.

The Maternity and Child Welfare Medical Officer visits the Day Nursery at frequent intervals and is also in close touch with the Matron as to any doubtful cases of admission.

Attendances.—The Day Nursery was open during the year for 250 full days and for 49 half-days (Saturdays). The total full-day attendances were 10,127 and the half-day attendances 2,413.

Teaching in Mothercraft.—The arrangement with the Education Committee for the teaching of Mothercraft at the Day Nursery

to schoolgirls continues. During the year 143 girls attended, coming from the following schools:—Elbow Lane, King Richard's Road, Holy Trinity, and St. Mary's. The girls come in batches (eight being the maximum number), one batch attending in the morning and one in the afternoon, and each batch attends for four weeks. The total attendances of schoolgirls were 2,605 and the daily average was 13.

Midwives.

A list of midwives who, during 1930, notified their intention to practise in the City of Leicester is appended (Table 16). Their inspection has been carried out by periodic visits to their homes. This entails many re-visits by the Inspector of Midwives, but is the only way, in the opinion of the writer, to ensure adequate supervision of midwives.

Nursing Homes (including Maternity Homes).

A list of registered Nursing Homes, including Maternity Homes, in the City with details as to registered accommodation is set out in Table 26.

The Home at 108 Humberstone Drive was closed at the request of the keeper of the Home during the year.

The Fosse Road Nursing Home was registered during 1930. One application for registration was not granted by the Maternity and Child Welfare Sub-Committee. In two registered homes the number of beds was increased by two.

The registered homes were inspected periodically during the year by the Maternity and Child Welfare Medical Officer. The accommodation and facilities vary considerably in the different registered homes, but every effort is being made to secure in all the homes a high standard of efficiency.

Assistance in Necessitous Cases.

A special Sub-Committee, of which Miss Cooper is Chairman, meets each week to consider applications for help in necessitous maternity cases. Every application has to be made in writing on a form which has been carefully drawn up for the purpose, and which has been modified from time to time as experience has suggested. In this form, signed by the applicant, a full statement has to be made of all sources of income, together with particulars as to rent, number of dependent children, &c. This statement is frequently checked by application to the employer, &c., and the Health Visitor appends a report on the case.

The following figures show the amount and variety of assistance given during the year :—

- 403 New cases were granted milk.
- 1,212 Old cases were granted milk.
- 6,078 Gallons of milk were granted free.
- 96 Cases were granted dried milk free.
- 476 Packets of dried milk were granted free.
- 26 Cases were admitted to the Day Nursery at reduced rate.
- 3 Cases were admitted free to the Day Nursery.
- 5 Cases were admitted to the Maternity Home at reduced rate.
- 1 Case was admitted free to the Maternity Home.
- In 31 cases doctors' fees were remitted.
- In 12 cases total fees for midwives were allowed.
- In 10 cases part fees for midwives were allowed.
- 4 Cases were assisted with a Home Help.
- In 74 cases no action was taken.

Local Government Act, 1929.

Under this Act, which came into force on 1st April, 1930, the Infant Life Protection Work was transferred to the Child Welfare Department ; the Health Visitors became the authorised inspectors of children under 7 years of age who are taken " for gain." Special record cards are in use for the purpose of recording particulars as to premises, nurse-woman and child. Repeated visits are made to ensure that a satisfactory standard is maintained for these children.

New Orthopædic and Light Department.

By a joint arrangement between the Education and Health Committees, an Orthopædic and Light Department has now been provided at Richmond House, the Newarkes, in connection with the School Medical Service.

It is intended for use by patients sent by either department and the expense is shared proportionately, but the work is under the control of the Education Committee and the Chief School Medical Officer, Dr. Allan Warner.

Children under 5 years of age are recommended for treatment, on special forms, by the doctors at the Infant Welfare Centres. These doctors were invited by the Medical Officer of Health to attend at Richmond House after the clinic had been working for two months and were shown over the building which has been efficiently equipped for the purpose.

Later, the Chief School Medical Officer, Dr. Allan Warner, kindly arranged for the Health Visitors to have an opportunity to see the various activities of the new department.

The first clinic was held in May, 1930, and during the year 84 children under 5 years of age received treatment—71 in the Light Department and 13 at the Orthopædic clinic.

Birth Control Clinic.

In September, 1930, the City Council passed the resolution of the Health Committee to establish a Municipal Birth Control Clinic, but as this was not opened during the year under review it need not be referred to further at present.

Puerperal Pyrexia and Puerperal Fever.

During the year 62 notifications were received, 54 of Puerperal Pyrexia and 8 of Puerperal Fever. The following tables set out various data of interest concerning these cases:—

			Puerperal Pyrexia.	Puerperal Fever.
Confined at home	..	..	21	7
Confined in institutions		..	33—54	1—8
Confinement attended by a doctor			34	5
Confinement attended by a midwife			20—54	3—8
Treated at home	..	..	11	1
Removed to hospital	..	..	19	6

Result of Treatment.

	Recovered.	Died.	Recovered.	Died.
At home ..	11	0	1	0
In institutions ..	37	6	4	3

It should be mentioned that several cases of pyrexia were due to causes not directly connected with childbirth and the rise of temperature was of short duration. Also that several cases occurring in maternity homes were transferred to hospital for treatment.

Under the Notification of Puerperal Pyrexia and Puerperal Fever Regulations, a medical practitioner may seek the co-operation of the public health authorities in four ways, viz., a bacteriological examination, a second medical opinion, and a trained nurse, and hospital treatment. Actually, since these regulations came into force in 1926, it is exceptional for a request to be made for the first three mentioned facilities, but during 1930 there was a marked increase in the number of cases admitted to the City Isolation Hospital. Of the 25 cases removed to hospital, 16 were admitted to this institution, 13 cases were discharged "well" and 3 cases terminated fatally (one was a case of acute pneumonia occurring in the lying-in period).

Maternal Mortality.

During the year 1930 there were 20 maternal deaths registered, including deaths associated with but not strictly due to childbirth. Of these 8 were due to puerperal sepsis and 12 were due to "other accidents and diseases of pregnancy and parturition." As the gross number of births registered was 4,171 (corrected number was 3,872, but for this purpose the gross number is the figure to be taken), this gives a maternal mortality rate of 4.79 per 1,000 births (as compared with 4.17 in 1929), and a puerperal sepsis rate of 1.9 (as compared with 1.2 in 1929). The latest figures available for England and Wales are a maternal mortality rate of 5.82 and a puerperal sepsis rate of 1.8 for the year 1929, so that Leicester compares favourably with the rest of the country.

The causes of death for 1930 are shown in the following table :—

Cause of Death.	All Ages.	20.	25.	30.	35.	40.
Puerperal Sepsis ..	8	1	5	1	1	—
Abortion	4	1	2	—	—	1
Accidents of Pregnancy ..	2	2	—	—	—	—
Heart Disease in Pregnancy	1	—	1	—	—	—
Accidents of Childbirth ..	4	1	—	2	1	—
Puerperal Nephritis and Uræmia	1	—	—	1	—	—
Totals	20	5	8	4	2	1

Puerperal sepsis accounted for 8 of the deaths, next comes abortion with 4 deaths, placenta prævia with 3 deaths, toxæmia of pregnancy 2 deaths, contracted pelvis 1 death, eclampsia 1 death, and heart disease in pregnancy 1 death.

In 15 cases the initial illness or confinement occurred in the patient's home, in 4 cases in a maternity home, and 1 case was in hospital with heart disease. All the cases were removed from their homes or transferred to an institution for treatment.

From this brief survey it will be seen that while much remains to be done to combat puerperal infection, yet in the present state of our knowledge many of these deaths must be regarded as largely unpreventable. Efforts are being made to devise practical schemes which will provide a skilled midwifery and medical service for women during the ante-natal, the lying-in and the post-natal periods. Such facilities would not only prevent much maternal morbidity, of which no true estimate can be made, but would also greatly reduce the maternal mortality rate by eliminating those cases in which such a deplorable termination is preventible.

Staff.

There have been no changes in the staff of the department during 1930.

In December, 1930, the question of some addition to the staff of Health Visitors was submitted for the consideration of the Maternity and Child Welfare Sub-Committee, and it was decided to recommend the appointment of a new Health Visitor in 1931.

E. B. BERENICE HUMPHREYS.

28th April, 1931.

Report of the City Analyst

For the Year 1930.

By F. C. BULLOCK, B.Sc., F.I.C.

Introduction.

The year under review is the first complete year with the present staff, which is as follows :—

Public Analyst . . . F. C. Bullock, B.Sc., F.I.C.

Assistant to P.A. . . . J. G. Lunt, B.Sc., A.I.C.

Laboratory Assistant . . . J. L. Pinder.

Work has proceeded on similar lines to previous years, except that a rather greater variety of samples has been taken.

No new legislation of note affecting the work of the Public Analyst has occurred during the year. The main Acts and Regulations now in force are as follows :—

Food and Drugs (Adulteration) Act, 1928.

Sec. 4 Milk and Dairies (Amendment) Act, 1922.

Sale of Milk Regulations, 1901 & 1912.

Sale of Butter Regulations, 1902.

Public Health (Condensed Milk) Regulations, 1923 & 1927.

Do. (Dried Milk) Regulations, 1923 & 1927.

Do. (Preservatives, &c., in Food) Regulations,
1925–1927.

Agricultural Produce (Grading and Marking) Act, 1928.

Artificial Cream Act, 1929.

Fertilisers and Feeding Stuffs Act, 1928.

Rag Flock Acts, 1911 & 1928.

The present state of the law governing Foods and Drugs is in many respects very unsatisfactory. Early in the year the Council of the Society of Public Analysts approached members of the Society to ascertain their views on required amendments to the Sale of Food and Drugs (Adulteration) Acts, in order to have a considered policy available in the event of legislation being introduced. Your Analyst in his contribution recommended an extension of the policy of imposing standards for the more important ingredients of food substances not yet brought within the scope of the Acts, and an extension of the Acts to include Patent Medicines and Cosmetics.

Further consolidation of the various Acts and Regulations was recommended, and a revision of the schedule to the Public Health (Preservatives, &c., in Food) Regulations to render it more explicit in the case of compound articles. Support was also given to the suggestion that a Statutory Advisory Committee be formed by the Ministry of Health to meet and consider problems as they arise.

I have very great pleasure once more in referring to the valuable help rendered towards the general working of the laboratory by my two assistants, Mr. J. G. Lunt and Mr. J. L. Pinder.

Summary of Samples.

The samples examined and reported upon during the year are classified in Table A. Roughly speaking it may be said that Food and Drug samples, including milk samples for bacteriological examination, constitute about two-thirds of the work; the other third comprises water samples, atmospheric pollution samples and miscellaneous samples under other Acts or for various Corporation Departments. For the latter, approximate commercial rates are charged.

TABLE A.

Category.	No. of Samples.
Sale of Food and Drugs Act	1,519
Milks for Bacteriological Examination ..	264
Isolation Hospital Milks	28
Rainwaters	36
Waters for Chemical Analysis	58
Waters for Bacteriological Examination ..	74
Rag Flock Act	2
Fertilisers and Feeding Stuffs Act ..	7

Miscellaneous Samples for Various Departments :—

Category.			No. of Samples.
Education Committee	..	..	3
Refuse Disposal Department	..	..	11
Tramways Committee	..	..	24
Bath Waters	..	..	26
Housing Department	..	..	3
H.M. Prison	..	..	1
Mental Hospital	..	..	2
Health Department	..	..	63
			2,121

Milk Samples.

The number of milk samples examined month by month, and the number found faulty is shown in Table B.

TABLE B.
Milk Samples Analysed during 1930.

Month.		Formal.	Informal.	Adulterated.	
				Formal.	Informal.
January	..	49	23	7	—
February	..	49	18	5	—
March	..	57	25	6	3
April ..	..	48	21	1	—
May ..	..	65	32	7	2
June ..	..	51	28	1	4
July ..	..	73	24	4	—
August	..	24	25	—	1
September	..	49	24	2	—
October	..	58	24	2	—
November	..	44	19	—	—
December	..	47	19	2	1
		614	282	37	11
		Total 896		Total 48	

The number of samples of milk reported "not genuine" form 5.3 per cent. of the total. This figure is very much lower than the corresponding one for 1929. It may be of interest to remark here that on 28th March, 1930, a local milk vendor was fined £10 in respect of each of 3 samples of grossly watered milk; on 15th April another vendor was fined 40s. for supplying watered milk. A fortnight later, before the same bench, another vendor was fined 40s. in respect of each of 2 samples of milk highly deficient of fat. After convicting in this case the Chairman remarked that in any further cases of defective milk in Leicester he would deal very severely. Thereafter, for several months, it was not found necessary to issue any more prosecutions in connection with defective milk samples.

In late May and June the usual crop of samples slightly deficient in fat were encountered. This phenomenon has been met in previous years; and while it has not yet been possible to connect this fat deficiency with the strawberry season, it seems significant that the average fat of all the samples taken at that time of the year is not noticeably below the year's average. The monthly average compositions of the samples analysed are given in Table C.

TABLE C.
Average Composition of Milk Samples.

Month.			No. of Samples.	Fat.	Solids not Fat.
				%	%
January	..	..	70	3.48	8.92
February	..	..	67	3.59	8.79
March	..	..	82	3.53	8.90
April	..	..	69	3.72	8.88
May	..	..	97	3.63	8.95
June	..	..	79	3.61	8.96
July	..	..	97	3.59	8.84
August	..	..	49	3.77	8.82
September	..	..	73	3.89	8.98
October	..	..	82	3.96	9.03
November	..	..	63	4.08	9.07
December	..	..	66	4.09	8.94

In addition to the defective milk samples enumerated in Table B and set out in greater detail in Table D, seven samples were reported "not so clean as is desirable" and the vendors were cautioned.

No preservatives were found in any milk samples.

TABLE D.
Adulterated Milk Samples.

No.	Formal or Informal.	Nature of Deficiency.	Action Taken.
377	Formal	50 ⁰ / ₁₀₀ deficient of Fat	Following up sample taken.
379	do.	50 ⁰ / ₁₀₀ do.	do.
381	do.	6 ⁰ / ₁₀₀ do.	do.
208	do.	2 ⁰ / ₁₀₀ deficient Solids not Fat ..	No Action.
214	do.	5 ⁰ / ₁₀₀ deficient of Fat	do.
216	do.	2 ⁰ / ₁₀₀ deficient Solids not Fat ..	do.
223	do.	2 ⁰ / ₁₀₀ do.	do.
192	do.	47 ⁰ / ₁₀₀ added water	Prosecuted, £10 fine.
193	do.	23 ⁰ / ₁₀₀ do.	do.
196	do.	49 ⁰ / ₁₀₀ do.	do.
186	do.	8 ⁰ / ₁₀₀ deficient of Fat	Caution by M.O.H.
44	do.	28 ⁰ / ₁₀₀ do.	Prosecuted, £2 fine.
52	do.	9 ⁰ / ₁₀₀ deficient of Fat	Prosecuted, £2 fine.
63	Informal	16 ⁰ / ₁₀₀ deficient Solids not Fat ..	
64	Formal	7 ⁰ / ₁₀₀ do.	
132	Informal	16 ⁰ / ₁₀₀ do.	
		Sold as new milk, but had been boiled	No Action.
65	Formal	6.6 ⁰ / ₁₀₀ deficient of Fat	Caution by M.O.H.
70	do.	32.3 ⁰ / ₁₀₀ do.	Prosecuted, £2 fine.
44	Informal	10 ⁰ / ₁₀₀ do.	Caution by M.O.H.
79	Formal	13 ⁰ / ₁₀₀ do.	do.
84	do.	27 ⁰ / ₁₀₀ do.	Caution by Chairman.
202	do.	1.7 ⁰ / ₁₀₀ deficient Solids not Fat ..	No Action.
340	do.	11 ⁰ / ₁₀₀ deficient of Fat	Caution by M.O.H.
341	do.	13 ⁰ / ₁₀₀ do.	do.
357	do.	14 ⁰ / ₁₀₀ do.	do.
346	do.	9 ⁰ / ₁₀₀ do.	do.
364	Informal	5 ⁰ / ₁₀₀ do.	do.
375	do.	14 ⁰ / ₁₀₀ do.	do.
378	Formal	15 ⁰ / ₁₀₀ do.	do.
380	do.	4 ⁰ / ₁₀₀ do.	do.
381	do.	8 ⁰ / ₁₀₀ do.	do.
463	do.	4 ⁰ / ₁₀₀ do.	do.
486	Informal	10 ⁰ / ₁₀₀ do.	do.
488	do.	3.5% deficient Solids not Fat ..	do.
495	do.	26 ⁰ / ₁₀₀ deficient in Fat	do.
522	do.	7 ⁰ / ₁₀₀ do.	do.
589	Formal	11 ⁰ / ₁₀₀ do.	do.
612	do.	5 ⁰ / ₁₀₀ deficient in Fat	No Action.
		3.6 ⁰ / ₁₀₀ deficient Solids not Fat ..	
613	do.	4.9% deficient Solids not Fat ..	
635	do.	4 ⁰ / ₁₀₀ deficient in Fat	Caution by M.O.H.
805	Informal	3.4 ⁰ / ₁₀₀ deficient Solids not Fat ..	do.
789	Formal	10 ⁰ / ₁₀₀ do.	County Authority advised further sample, 13 ⁰ / ₁₀₀ de- ficient Solids not Fat. £10 fine.
797	do.	7 ⁰ / ₁₀₀ do.	
1065	do.	5 ⁰ / ₁₀₀ do.	Caution by M.O.H.
1089	do.	25 ⁰ / ₁₀₀ deficient Fat	do.
896	Informal	2.6 ⁰ / ₁₀₀ do.	do.
1215	Formal	8.7% deficient Solids not Fat ..	do.
38	do.	3.6 ⁰ / ₁₀₀ deficient Fat	do.

The results of Bacteriological Examinations of samples of Graded Milk taken under the Milk (Special Designations) Order, 1923, are set out in Table E.

TABLE E.

Grade.	Total No. examined.	Passed as satisfactory.	Total count too high.	B. Coli too numerous.
Certified	18	16	2	1
Grade "A" (T.T.) ..	53	45	7	5
Grade "A"	153	133	10	15
Pasteurised	—	—	—	—
New Milk	49	34	7	13
Sterilised Milk ..	5	3	2	0
Total	278	231	28	34

89% of the Certified Milk samples were passed as satisfactory.

85% „ Grade "A" (T.T.) „ „ „

87% „ Grade "A" „ „ „

There are at present no accepted Bacteriological standards for New Milk or Sterilized Milk.

Provisionally we adopt the standard that Bottled New Milk must not have a count exceeding 1,000,000 microbes per c.c. nor contain B. Coli in less than 0.01 c.c. If a sample fails in either respect it is not passed.

Similarly for Sterilised Milk (which does not quite imply sterile milk) a maximum count of 1,000 per c.c. is adopted and B. Coli to be absent from 1 c.c. and less.

Foods and Drugs.—Tables F. and G show the samples of food other than milk, and drugs examined during the year, and Table H gives the defective samples and the action taken.

TABLE F.
Foods Analysed in 1930.

Sample.	1st Quarter.	2nd Quarter	3rd Quarter.	4th Quarter.	Total.
Pea	12	6	..	6	24
Cocoa .. ..	..	6	..	..	6
Coffee	6	..	6	1	13
Butter	12	..	22	..	34
Lard .. ..	..	12	..	6	18
Margarine	6	..	..	8	14
Dripping	6	..	..	..	6
Cheese .. ..	..	6	..	2	8
Ground Rice	4	..	..	..	4
Tapioca	4	..	..	..	4
Flaked Rice	4	..	..	..	4
Bread .. ..	..	6	..	..	6
Mustard	6	..	..	..	6
Pepper	6	3	6	..	15
Salt	6	..	..	..	6
Wines .. ..	..	6	..	..	6
Bacon	1	..	..	..	1
Clear Mints	17	12	2	7	38
Sugar	6	..	8	..	14
Cream Cakes	6	..	..	..	6
Vinegar	9	2	..	..	11
Malt Vinegar	3	..	..	..	3
Jam	6	..	..	..	6
Cooking Oils	5	8	..	..	13
Cooking Fats	3	6	..	..	9
Sunnycomb	1	..	..	..	1
Caviar	3	..	..	..	3
Baking Powder .. ..	..	5	..	..	5
Condensed Milk .. ..	..	3	..	..	3
Arrowroot .. ..	..	8	..	..	8
Sausage .. ..	..	2	9	..	11
Potted Meat .. ..	..	1	2	..	3
Potted Fish .. ..	..	1	..	..	1
Cream .. ..	..	3	23	..	26
Lemonade Powder .. ..	..	..	6	..	6
Joyso .. ..	..	..	2	..	2
Aerated Water .. ..	..	..	12	..	12
Ice Cream .. ..	..	..	7	..	7
Spirits .. ..	..	..	7	7	14
Sweets .. ..	..	..	25	..	25
Beer .. ..	..	..	..	11	11
Bottled Fruit .. ..	..	..	..	1	1
Tinned Peas .. ..	..	..	..	2	2
Tinned Fruit .. ..	..	..	..	10	10
Tinned Fish .. ..	..	..	..	..	..
Raisins .. ..	..	..	..	24	24
Currants .. ..	..	..	..	..	..
Sultanas .. ..	..	..	..	..	..
Vitacream .. ..	..	..	..	1	1
Mincemeat .. ..	..	..	..	7	7
Shredded Suet .. ..	..	..	..	7	7
Polony .. ..	..	..	..	1	1
Black Pudding .. ..	..	..	..	1	1
Salami .. ..	..	..	..	1	1
	132	96	137	103	468

TABLE G.
Drugs Analysed in 1930.

Sample.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Tartaric Acid	3	..	..	..	3
Citric Acid	3	1	..	..	4
Sodium Bicarbonate ..	3	1	..	..	4
Cream of Tartar	3	1	..	..	4
Lime Water	12	..	..	..	12
Mercury Ointment	8	..	..	8
Friars Balsam	6	..	..	6
Sulphur Ointment	3	..	..	3
Sulphur Tablets	3	..	..	3
Epsom Salts	14	..	..	14
Glauber's Salts	13	..	..	13
Eucalyptus Oil	1	..	..	1
Cod Liver Oil	1	..	4	5
Paregoric	1	..	..	1
Sodium Carbonate	1	..	..	1
Sulphur	1	..	..	1
Vaseline	1	..	..	1
Boric Acid	1	..	..	1
Hydrogen Peroxide	6	..	6
Glycerine	6	..	6
Cloves	3	..	3
Aspirin Tablets	4	..	4
Bismuth Tablets	4	..	4
Phenacetin Tablets	2	..	2
Potash Tablets	3	..	3
Formalin Tablets	6	6
Borax	14	14
Ammoniated Tincture of Quinine	5	5
Camphorated Oil	4	4
Influenza Mixture	1	1
Malt Extracts	4	4
Malt and Oil	2	2
Prescriptions	6	6
	24	57	28	46	155

TABLE H.
Adulterated Samples other than Milk.

No	Description.	Formal or Informal	Nature of Adulteration.	Action Taken.
385	Clear Mints	Informal	640 parts per million of sulphur dioxide ..	Following up samples taken.
386	do.	do.	790 do. ..	
388	do.	do.	148 do. ..	
340	do.	do.	550 do. ..	
342	do.	do.	435 do. ..	
344	do.	do.	470 do. ..	Prosecution, £3 fine.
399	do.	Formal	613 do. ..	
400	do.	do.	320 do. ..	
288	do.	do.	670 do. ..	
289	do.	do.	490 do. ..	
290	do.	do.	165 do. ..	Case not taken.
243	Malt Vinegar }	Informal	At least 50% ordinary vinegar ..	
93	Caviar	do.	0.198% Boric Acid present	Caution by M.O.H. Following up sample taken.
94	do.	Formal	0.124% do. ..	Wholesaler prosecuted. Case dismissed on payment of costs. £4 12s. 0d.
95	do.	do.	0.38% do. ..	
97	Mercury Ointment }	Informal	83% deficient in Mercury ..	Following up sample taken.
98	do.	Formal	56% do. ..	
431	Magnesium Sulphate	Informal	100% Sodium Sulphate supplied ..	Formal sample genuine.
572	Butter	do.	17.5% water ..	do.
460	do.	Formal	16.4% water ..	Caution by M.O.H.
774	Mints	Informal	175 parts per million of Sulphur Dioxide	do.
743	Brandy	do.	38.4 degrees U.P. ..	do.
955	Sausage	do.	Preservative present not declared	do.
749	Lime Drops }	do.	716 parts per million of sulphur dioxide	Formal sample taken.
1004	do.	Formal	769 do. ..	£2 fine.
776	Bismuth Tablets }	Informal	22% deficient of Bismuth ..	Formal sample taken.
1005	do.	Formal	32% do. ..	Prosecution. Warrant defence successful.
962	Butter	Informal	18.02% water ..	Vendors cautioned by M.O.H. and communication sent to Sanitary authority of district where butter manufactured
963	do.	do.	16.4% water ..	
965	do.	do.	0.01% Boric Acid ..	
970	do.	Formal	16.6% water ..	
971	do.	do.	0.01% Boric Acid ..	
1034	Tinned Herrings	Informal	3.3 grains of tin per lb.	Following up samples taken.
1035	Tinned Silver Fish		2.2 do. ..	

TABLE H.—continued.

No.	Description.	Formal or Informal.	Nature of Adulteration.	Action Taken.
1253	Whiskey	Informal	39.9 degrees U.P. ..	Cautioned by M.O.H. Formal sample genuine.
1147 1097	Suet Prescrip- tion }	Informal Formal	21.2% starch .. { 29% excess Mag. Carb. Lev. .. 37% excess Mag. Sulph.	Caution by M.O.H. Prosecution authorised.
997	Tinned Silver Fish	do.	2.4 grains per lb. of tin	Strong caution by Chairman.
998	Tinned Herrings	do.	4.8 do. ..	
1099	do.	Informal	5.4 do. ..	
891	Clear Mints }	do.	316 parts per million of sulphur dioxide (Labelling offence. The claim that the article was a genuine rich meat gravy was re- ported to be mis- leading in view of the actual composi- tion of the sample.	Caution by M.O.H.
684	Joyso	Informal		
751	do.	Formal		

Preservatives in Food.

The present position with regard to the use of preservatives in foods is defined by the Public Health (Preservatives, &c., in Food) Regulations, 1925-1927. Briefly, it is now illegal to use most of the former well-known chemicals such as boric acid, borax, salicylic acid, formaldehyde, sodium fluoride for food preserving purposes. Sulphur dioxide and benzoic acid are, however, permitted in restricted amounts for a scheduled list of foods, and in some cases have to be declared.

Boric acid was detected in considerable quantity in 3 samples of caviar, and in smaller quantity in 2 samples of butter. In all cases the retailers were protected by warranty.

Sulphur dioxide may only be applied to sausage if its presence is declared. In one case no such declaration was made.

The same preservative was found in excessive quantity in a number of samples of sweets, where, however, it had been used as a bleach and not as a preservative.

Clear Mints.

A certain interest attaches to this line of confectionery which has attained great popularity in recent years, and is sold in large

quantities under many fancy names, since a number of brands are manufactured locally.

Normally, the mints are made from granulated sugar and liquid glucose, and contain a small proportion of sulphur dioxide derived from the glucose. The maximum amount of sulphur dioxide introduced by the raw materials composing the mints, assuming 40 per cent. glucose and 60 per cent. sugar, would be 220 parts per million. In the boiling a good deal of this sulphur dioxide is lost ; several series of laboratory tests have shown that usually not more than 25 per cent. of the original sulphur dioxide is retained as such in the final product. That is, mints containing 40 per cent. of glucose containing originally 450 parts per million of sulphur dioxide would, if otherwise untreated, contain not more than about 55 parts per million of sulphur dioxide.

The rather unnatural whiteness of several brands on the market led to the suspicion that artificial bleach was being used, and samples of these brands were in fact found to contain excessive quantities of sulphur dioxide. The regular consumption of considerable doses of this drug is a large price for the sweet-eating public to pay for the dubious advantage of having their sweets colourless.

This undesirable and unnecessary practice of adding chemical bleach appeared to have obtained a great hold upon manufacturers, since one firm was found actually adding it to green coloured lime drops, where, presumably, it would ultimately decolorise the green, putting the manufacturer to the trouble of re-dyeing his drops after a short time in stock.

One firm was found carefully adding to every 100 lbs. of sugar mixture one ounce of a strong solution of sodium bisulphite saturated with sulphur dioxide from a bottle labelled "Not to be used in Confectionery."

Proceedings were instituted against the worst offenders and convictions obtained. Batches of samples taken subsequently showed that the haphazard use of bleach had stopped, but that it was still being used in carefully regulated quantity.

As long as the public is deceived by the false appearance of purity of the colourless sweets, the use of bleach will not disappear entirely, until a clear ruling on the subject is given by the Ministry of Health.

Tinned Fish.

A number of samples of Tinned Herring and Tinned Silver Fish were certified as being badly contaminated with tin. In one

case the tin of the container had been dissolved by the foodstuff and some of it had been redeposited on the container in patches ; the foodstuff still retaining tin to the extent of 5 grains of metallic tin per lb. of foodstuff. The vendor was strongly cautioned by the Chairman.

Spirits.

Two informal samples, one of Brandy and one of Whiskey, were below the legal strength of 35 degrees under proof. The degree of fraud committed in over-watering spirits may be realised when one remembers that the publican charges 12s. 6d. per pint for the water he adds—the milk diluter only gets 3d. or 4d. per pint.

Drugs.

One sample of “ Magnesium Sulphate ” supplied in a printed carton consisted entirely of Sodium Sulphate.

An informal sample of “ Mercury Ointment ” was 83 per cent. deficient of its required amount of mercury and was badly mixed. A subsequent formal sample was better, but still 56 per cent. deficient of mercury. It appeared that this latter sample was supplied to the strength given in a local Pharmacopœia. When a third sample was taken and B.P. strength definitely asked for, the correct strength was supplied.

A sample of Bismuth Lozenges had stamped on each lozenge “ 2 grains B.P.” and was presumably made according to the formula in the 1898 B.P. Examination showed that each tablet contained only 1.4 grains of bismuth compound and was likewise deficient of the other potent ingredients. Moreover, maize starch was present to the extent of 20 per cent. of the whole weight.

The following up formal sample was similarly unorthodox.

The retailer was protected by Warranty, and as this was over six months old, the Warrantor was protected by the Summary Jurisdiction Act of 1848. It is only fair to say that the firms concerned went to a lot of trouble to withdraw from sale all tablets of the same batch, and at an early date went over to the 1914 B.P. formula.

The case was of interest in revealing the anomaly that the public is entirely without protection where stock is more than six months' old, if such stock was originally supplied under Warranty.

Fertilisers and Feeding Stuffs Act.

Seven informal samples of Fertilisers were taken : 1 Basic Slag, 1 Superphosphate of Lime, 2 Sulphate of Ammonia, 1 Sulphate of Potash, 1 Nitrate of Soda, and 1 Compound Fertiliser.

Basic Slag.—The composition of the sample agreed with the composition indicated in the Statutory statement within the limits prescribed under the Act (declared 32 per cent., found 31.1 per cent. tricalcium phosphate).

The form of the Statutory statement was not in accordance with the requirements of the Act. The phosphate content of the sample was expressed as “phosphates” (tricalcium phosphate), whereas it should have been expressed as phosphoric acid (P_2O_5). Further, the amount which would pass through the prescribed sieve was not declared.

Superphosphate of Lime.—The soluble phosphoric acid found (14.5 per cent.) was slightly above the amount claimed (30.0 per cent. soluble phosphate equivalent to 13.7 per cent. phosphoric acid). The Statutory statement was irregular.

Sulphate of Ammonia.—In one sample the amount of nitrogen found (19.78 per cent.) agreed with the amount claimed (19.75 per cent.). The Statutory statement was defective, since no mention was made of the free acidity (0.14 per cent.).

No Statutory statement was supplied with the other sample. It contained 20.6 per cent. nitrogen, 0.25 per cent. free acid.

Sulphate of Potash and Nitrate of Soda.—These samples gave a good average analysis, but in neither case was any declaration of composition made.

Vine, Plant and Vegetable Manure.—This sample complied with its declared analysis of $3\frac{1}{4}$ per cent. nitrogen, 10 per cent. total phosphoric acid, $5\frac{1}{2}$ per cent. soluble phosphoric acid, 5 per cent. pure potash, and the statement supplied was in correct form.

The vendors of the various samples that did not comply with the Regulations were interviewed and advised to acquaint themselves with their obligations under the Act.

Rag Flock Act.

The Act requires that the soluble chlorine in the form of chlorides, determined in a definite manner, shall not exceed 30 parts per 100,000.

The two samples examined contained 7.7 and 5.0 parts per 100,000 respectively.

Atmospheric Polution.

Regular readings were obtained through the year from the three Soot Gauges placed at Town Hall, Milton Street and Western Park.

The mean monthly deposits obtained were as follows:—

(Quantities expressed in English tons per square mile.)

			Town Hall.	Milton Street.	Western Park.
Insoluble Matter	{	Tarry matter	.32	.40	.1
		Soot ..	5.7	6.6	1.0
		Ash ..	14.3	13.0	1.9
Soluble Matter	{	Volatile Matter ..	2.7	3.5	1.5
		Ash ..	5.1	5.3	1.6
Sulphate	..	..	2.3	3.1	.9
Chloride	..	..	0.8	.65	.4
Ammonia	..	..	0.18	.32	.07
Total Solids ..			28.2	28.9	6.1

The 16th report of the central body concerned with this investigation discloses the fact that for the year ending 31st March, 1930, Western Park had the least average monthly total deposit of any of the places where gauges are installed. This is the second year in succession that Western Park has had that distinction.

F. C. BULLOCK.
City Analyst.

REPORT OF CHIEF SANITARY INSPECTOR.

Staff.

The Inspection Staff consists of a Chief Inspector, two Meat Inspectors whose whole time is occupied at the Corporation Slaughterhouses at the Cattle Market, and fourteen District Sanitary Inspectors. There was one change in the staff, J. Yates of Bootle being appointed to fill the vacancy caused by the death of F. Sowerbutts. No addition was made to the sanitary inspection staff during the year.

A special feature of the year was the Slum Clearance legislation—Housing Act, 1930,—the provisions and administration of which Act has been the subject of discussion at many sanitary inspectors' meetings.

During the winter session, 1929-1930, a second year's course in "Animal Biology and Bacteriology" was taken by many of your sanitary inspectors at the Leicester College of Technology. It is expected and hoped that the course will continue for several more years.

Synopsis of Sanitary Inspection Work.

			Inspections.	Re-Inspections.	Total.
Re Accumulations	..	..	130	22	152
Re Animals, Poultry, Swine, &c.	..	..	79	1	80
Ashpits and Ashbins	..	..	336	136	472
Bakehouses—Factory	..	..	163	15	178
Non-Factory	..	..	87	2	89
Canal Boats	..	..	26	—	26
Cesspools	..	..	8	—	8
Closets—Water	..	..	532	180	712
Pails	..	..	32	—	32

	Inspections.	Re-Inspections.	Total.
Common Lodging Houses—Day ..	363	—	363
Night ..	—	—	—
Complaints Received	1881	2902	4783
Complaints Confirmed	1713	3876	5589
Cowsheds	25	—	25
Dairies, Milkshops and Milkstores ..	627	—	627
Dangerous Structures	41	—	41
Drains Inspected—Smoke Tests ..	3466	100	3566
Chemical Tests ..	6	—	6
Colour Tests ..	48	—	48
Drains Inspected	5155	4755	9910
Entertainment Houses	30	—	30
Factories	119	—	119
Fish Frying Premises	57	—	57
Food Manufacturing Premises ..	187	—	187
Houses re Contagious Disease ..	1722	—	1722
Houses re Contagious Disease			
Enquiry	5024	—	5024
Houses re Disinfection	297	—	297
Housing Acts—Houses	471	7171	7642
Special Visits ..	2085	—	2085
Houses Let in Lodgings—Day ..	2	—	2
Hotel and Restaurant Kitchens ..	16	—	16
Icecream Premises	189	—	189
Meeting with Owner or Tradesman ..	3505	—	3505
Merchandise Marks Act	593	—	593
Agricultural Produce (Grading and			
Marking) Act	363	—	363
Offensive Trade Premises	215	—	215
Piggeries	3	—	3
Shops—Meat	1963	—	1963
Fish	448	—	448
Fruit	362	—	362
Schools.. ..	10	—	10
Slaughterhouses (Private) ..	8568	—	8568
Smoke Observations	284	—	284
Special Interviews with Stokers, &c. ..	191	—	191
Special Visits	3225	—	3225
Sewers, &c.	15	—	15
Street Gullies	1	—	1
Streets or Back Roads	19	—	19

			Inspections.	Re-Inspections.	Total.
Tips	..	..	..	31	31
Urinal—Public	..	..	..	71	71
Private	..	..	..	32	32
Van Dwellings	..	..	..	146	146
Workshops and Workplaces (ex- cluding Bakehouses)	..	..	260	6	266
Yards and Courts	..	..	460	65	525
Grand Totals	..		45682	19231	64913

Notices—Served	—Informal	..	..	1433
	—Formal	..	..	167
Complied with	—Informal	..	..	1392
	—Formal	..	..	342
Samples—Food and Drugs Acts	..	..	..	623
Water	..	..	..	19
Bacteriological	..	..	..	264
Milk for T.B.	..	..	..	86

CANAL BOATS.

The whole of the “available” boats on the register, viz., 51 are “Narrow” boats. 23 boats were inspected during the year; these were occupied by 28 males, 16 females, 5 children over 5 years and 1 under 5 years.

The condition of the boats was clean and satisfactory.

A smaller number of boats were inspected during 1930 than in previous years, although the usual visits have been made to the wharves. The closing of the Lero Electricity Works has been one of the causes, and local firms owning canal boats have their boats lying idle.

DISINFECTION.

The total number of articles of clothing, bedding, &c., disinfected by steam during the year was 4,721. The number of houses or parts of houses disinfected was 2,115.

DRAINS.

Voluntary Cleansing of Stopped Drains by Health Department.

117 drains were attended to, and of these 69 were unstopped immediately. In the remaining 48 cases the owners' attention had to be called to them.

ADMINISTRATION OF FACTORY AND WORKSHOPS ACT, 1901.

In connection with Factories, Workshops, Workplaces and
Home Work.

1.—Inspection of Factories, Workshops and Workplaces.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories	178	12	—
Workshops	266	3	—
Total	444	15	—

2.—Defects found in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects		Number of Prosecutions. (4)
	Found. (2)	Remedied. (3)	
Nuisances under the Public Health Act :—			
Want of Cleanliness ..	4	4	—
Want of Ventilation ..	6	4	—
Overcrowding	—	—	—
Other Nuisances ..	14	10	—
Sanitary Accommodation Insufficient	5	5	—
Offences under the Factory and Workshops Act ..	—	—	—
Total	29	23	—

3.—Home Work.

The number of lists received from employers was as follows:—

	Twice in the year.		Once in the year.	
	Lists.	Outworkers.	Lists.	Outworkers.
Wearing Apparel (making) ..	44	736	52	560

4.—Other Matters.

CLASS (1).

Matters notified to H.M. Inspector of Factories :—

Failure to affix Abstract of the Factory and Workshops Acts
(S. 133, 1901) None

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	{	Notified by H.M. Inspector	28
Reports (of action taken) sent to H.M. Inspector		25	

Underground Bakehouses (S. 101) in use at the end of the year 1

Improvements to Houses.

	No. of Houses.
Separate internal water supply in place of taps in common yards	297
Additional water closets	142
Houses formerly with common yards and common sanitary conveniences, which have now been provided with separate yards, separate sanitary conveniences, internal sinks, taps, &c. ..	51

Water Closet Accommodation used in common by several houses.

In the past the Health Committee have required that sufficient water closets shall be provided so that not more than two houses share the use of one closet.

During the year this standard was raised and a separate closet is now required for each house except in cases where, owing to the bad situation or condition of the property such expense is considered unwarrantable.

TABLE A.

			Tons.	Cwts.	Qrs.	Lbs.
Meat	76	8	0	23		
Fish	26	9	0	23		
Fruit	12	18	0	18		
Vegetables	16	7	2	27		
Rabbits .. .. .	..	..	..	2667		
Preserved Foods (Tinned Goods) .. .. .	..	..	..	11673		
Poultry .. .. .	..	..	..	9		
Eggs .. .. .	..	..	..	472		
Hares .. .. .	..	..	..	8		
Game .. .. .	..	..	..	35		
Oysters .. .. .	..	..	..	900		

MEAT.

TABLE B.

Total weights of British and Imported Meat and Offal rejected, at various premises.

		Tons.			Cwts.			Qrs.			Lbs.		
British Meat		64			5			3			26		
Imported Meat		..			..			..			19		
British Offal		7			8			2			23		
Imported Offal		4			7			0			11		
Total Weight ..		76			8			0			23		
		British Meat.			Imported Meat.			British Offal.			Imported Offal.		
		Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
Shops ..	..	-	5	0	8	-	-	3	6	-	-	-	-
Private Slaughterhouses		13	0	2	11	-	-	-	-	4	3	2	1
Cattle Market ..		49	11	0	20	-	-	-	-	-	-	-	-
Corporation Cold Stores		-	2	2	20	-	-	-	-	-	-	-	-
Retail Market	..	-	3	2	1	-	-	-	-	-	-	-	-
Wholesale Market (Imported)	..	-	-	-	-	-	5	2	13	-	3	2	10
Railway Stations ..		1	2	3	22	-	-	-	-	-	-	-	-
Totals ..		64	5	3	26	-	6	1	19	7	8	0	11

TABLE C.

Total weights of Carcases, Parts of Carcases, and Offal, rejected for all diseases.

	Carcase.				Parts of Carcase.				Offal.				Total.		
	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.
Tuberculosis	20	3	3	7	10	6	2	3	3	1	0	11	33	11	1
Other defined Diseases	28	7	1	16	5	14	2	19	8	14	2	23	42	16	3
Total	48	11	0	23	16	1	0	22	11	15	3	6	76	8	0
															23

TABLE D.

Total number of Carcases found affected, for various diseases.

Carcases affected with Tuberculosis.	Carcases affected with other defined diseases.		Total number of Carcases affected. (All diseases)
	1777	1960	
			3737

Number of healthy Carcases examined not available.

TABLE E.

Number of Carcases showing evidence of Tuberculosis and number of entire Carcases rejected.

	Beasts.	Calves.	Pigs.	Total.
Number of Carcases affected	368	1	1408	1777
Number of entire Carcases rejected	90	1	38	129

TABLE F.
Total number of Carcases rejected for Tuberculosis and other defined diseases.

Disease.	Bulls.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total of all Carcases.
Tuberculosis ..	-	64	16	10	1	-	-	38	129
Other defined diseases ..	5	42	6	9	45	181	32	120	440
Totals ..	5	106	22	19	46	181	32	158	569

TABLE G.
Total Number of all Carcases, parts of Carcases, and Offal, rejected for all diseases.

Disease.	Carcases.	Parts of Carcase.	Offals of Carcase.	Total number affected.
Tuberculosis	129	1335	313	1777
Other defined diseases ..	440	183	1337	1960
Totals	569	1518	1650	3737

TABLE H.
Total number of Carcases, parts of Carcases and Offal condemned in :—

	Carcases.	Parts of Carcase.	Offals of Carcase.	Total number affected.
Corporat'n Slaughter Houses (including Co-operative Society Slaughter House at Cattle Market) ..	432	1369	1311	3112
Private Slaughter Houses ..	116	129	310	555
Shops, Markets and other Premises	21	20	29	70
Totals	569	1518	1650	3737

TABLE I.

Tabulated List of other defined Diseases and their incidence in Carcasses rejected.

Disease.	Cows.	Heifers.	Bullocks.	Bulls.	Calves.	Sheep.	Lambs.	Pigs.	Total.
Dropsy ..	11	2	2	5	10	106	11	5	152
Fever—Acute	11	—	2	—	5	17	5	4	44
Uremia	1	—	—	—	—	—	—	—	1
Lymphadenitis..	—	—	—	—	1	1	—	—	2
Pneumonia ..	2	1	—	—	4	5	6	2	20
Decomposition	1	—	—	—	1	10	2	3	17
Emaciation ..	—	—	—	—	1	8	3	—	12
Asphyxia	—	—	—	—	1	6	—	—	17
Dead Animals	—	—	—	—	—	11	—	10	33
Immaturity ..	—	—	—	—	16	—	—	22	30
Bruising—Extensive	1	—	1	—	—	9	3	11	12
Gangrene ..	1	—	1	—	—	1	—	—	3
Septic Metritis	—	—	—	—	—	—	—	1	1
Septicæmia ..	2	1	—	—	1	2	—	2	8
Pyæmia	—	—	—	—	—	—	—	1	1
Swine Fever ..	—	—	—	—	—	—	—	55	55
Johnnes' Disease	10	1	3	—	—	—	—	—	14
Jaundice ..	1	—	—	—	1	—	—	—	2
Swine Erysipelas	—	—	—	—	—	—	—	3	3
Enteritis ..	1	1	—	—	4	4	2	—	12
Black Leg ..	—	—	—	—	—	1	—	—	1
Total ..	42	6	9	5	45	181	32	120	440

SAMPLING.

Food and Drugs (Adulteration) Act.

NUMBER OF SAMPLES TAKEN FOR CHEMICAL ANALYSIS.

1926	1927	1928	1929	1930
686	847	927	1552	896

Milk (Special Designations) Order, 1923.

NUMBER OF SAMPLES TAKEN FOR BACTERIOLOGICAL EXAMINATION.

1926	1927	1928	1929	1930
185	308	330	376	264

MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

(This Act came into operation on 1st September, 1925.)

Number of samples of milk taken for microscopical and biological examination for Tubercle Bacilli—

1927	1928	1929	1930
120	120	120	86

	Number of Samples taken.	Number reported containing Tubercle Bacilli.	Number reported negative.	Number unsatisfactory although negative as regards Tubercle Bacilli.
Cowkeepers with registered premises within City boundaries ..	23	1	19	3
Cowkeepers with premises outside City boundaries ..	63	3	57	3
Totals ..	86	4	76	6

Percentage of milk samples containing Tubercle Bacilli, 4.7.

City Herds.

The sample reported as containing Tubercle Bacilli is a repeat sample of a former "bulk" sample taken in November, 1929, and reported as Positive in the Annual Report for 1929.

A cow was removed from the herd and slaughtered under the Tuberculosis Order.

Reports on samples from three cows in this same herd showed them to be suffering from "suppuration of the udder." Notices were therefore served upon the owner calling his attention to the provisions of the Milk and Dairies (Consolidation) Act, 1915, S. 5, which prohibits the sale of milk from such animals for human consumption.

Repeat samples taken later were reported as satisfactory.

County Herds.

Of the 63 samples of milk produced outside the City, the three which were reported to contain Tubercle Bacilli were referred to the County Authority for action, and in due course reports were received from them of action taken under the Milk and Dairies (Consolidation) Act, 1915.

The Post-mortem examinations of the guinea pigs inoculated with the milk for which unsatisfactory reports, although negative as regards T.B., were received are as follows :—

- (1) No Tubercle Bacilli found. Films made from exudate at site of inoculation showed large numbers of pus cells and streptococci.
- (2) Died from causes other than Tuberculosis.
- (3) Died from causes other than Tuberculosis. No evidence of T.B. in any of the organs.

These three samples are being repeated.

SLAUGHTERHOUSES.

Particulars of all Slaughterhouses in the City.

Registered Private Slaughterhouses	42
Licensed Private Slaughterhouses (includes one Knacker's Yard)	2
Corporation Slaughterhouses situated at Cattle Market and let off as Private Slaughterhouses	18
Total Slaughterhouses	62

SMOKE ABATEMENT.

Action taken re smoke nuisances :—

Observations taken of chimney stacks	284
Chimneys reported for causing nuisance	6
Cautions by Inspectors	2
Interviews of Engineers or Stokers by Inspectors ..	191
Informal Notices or Letters sent	3
Chimneys reported to Health Committee ..	6
Prosecutions	1

LEGAL PROCEEDINGS.

Public Health Acts.

For the abatement of nuisances	2
--------------------------------------	---

Merchandise Marks Act, 1926	3
--	---

Public Health (Meat) Regulations, 1924	6
---	---

Food and Drugs (Adulteration) Act, 1928 ..	11
---	----

Milk and Dairies Order, 1926	1
---	---

Leicester Improvement Drainage and Markets Act, 1868.

Smoke Nuisance	1
------------------------	---

Appeals (Housing Act, 1925)	4
--	---

Appeals were made to the Minister of Health by the owners of four dwelling houses against the Local Authority's refusal to determine Closing Orders. The action of the Local Authority was upheld in each case and the appellants had to bear the cost of the public enquiry. Two further appeals were made against Closing Orders, but these were later withdrawn.

LEGAL PROCEEDINGS.

Acts, Byelaws or Regulations under which proceedings were instituted.	Default or Offence	Result.	Fines. £ s. d.	Costs. £ s. d.
Milk & Dairies Order, 1926	Failing to inscribe name and address on milk utensils, and not being registered as a milk seller	Conviction. Failing to inscribe name and address. Non-registration	2 0 0 2 0 0	— —
Public Health Acts, Leicester Corporation Act	Failing to comply with notice to abate nuisance arising from defective drains. (Four defendants.)	Case adjourned for one month. Case withdrawn. Work having been carried out	—	—
Ditto	Ditto	Order of Court to complete work and pay costs	—	0 5 0
Merchandise Marks Act, 1926	Exposing imported tomatoes for sale and failing to show indication of origin	Conviction	0 10 0	—
Ditto	Ditto	Conviction	0 10 0	—
Ditto	Ditto	Conviction	0 10 0	—
Leicester Improvement Drainage & Markets Act, 1868	Excessive smoke emitted from factory chimney	Conviction. Firm fined Stoker fined	1 0 0 0 5 0	— —
Carried forward			6 15 0	0 5 0

LEGAL PROCEEDINGS—Continued.

Acts, Byelaws or Regulations under which proceedings were instituted.	Default or Offence.	Result.	Fines. £ s. d.	Costs. £ s. d.
Food and Drugs (Adulteration) Act, 1928	Selling mint sweets containing an excessive amount of sulphur dioxide. (670 parts per million.)	Brought forward (conviction)	6 15 0 3 0 0	0 5 0 —
Ditto	Ditto. (490 parts per million.)	Conviction	3 0 0	—
Ditto	Ditto. (613 parts per million.)	Conviction	3 0 0	—
Ditto	Ditto. (320 parts per million.)	Conviction	3 0 0	—
Ditto	Selling adulterated milk :— (1) 47% added water (2) 47% " " (3) 49% " "	Conviction in each case	10 0 0 10 0 0 10 0 0	— — —
Ditto	Selling adulterated milk 16% added water	Conviction	2 0 0	—
Ditto	Selling adulterated milk 32.3% deficient in fat	Conviction	2 0 0	—
Ditto	Selling adulterated milk 28% deficient in fat	Conviction	2 0 0	—
Ditto	Selling two samples of caviar containing 0.12% and 0.375% boric acid.	Conviction. Pay costs		4 12 0
Carried forward			54 15 0	4 17 0

LEGAL PROCEEDINGS—Continued.

Acts, Byelaws or Regulations under which proceedings were instituted.	Default or Offence.	Result	Fines £ s. d.	Costs £ s. d.
Food and Drugs (Adulteration Act, 1928)	Selling bismuth tablets deficient of 41% normal amount of bismuth.	Brought forward .. Warranty produced, but found to be more than six months old, case therefore dismissed.	54 15 0	4 17 0
Ditto	Selling lime drops containing 770.0 parts per million sulphur dioxide	Conviction	2 0 0	—
Public Health (Meat) Regulations, 1924. (Part IV.—Stalls)	Failing to cause stall to be screened at the sides and back.	Conviction	0 10 0	—
Ditto	Ditto	Conviction	0 10 0	—
Ditto	Ditto	Conviction	0 10 0	—
Public Health (Meat) Regulations, 1924. (Part V.—Shops)	Exposing meat and failing to prevent contamination by dust.	Conviction	2 0 0	—
Ditto	Ditto	Conviction. Firm fined Manager fined	2 0 0 2 0 0	0 5 0 0 5 0
		Total	64 15 0	5 7 0

Reports of the V.D. Medical Officers.

1.—Report on the MALE V.D. Clinic.

By H. J. BLAKESLEY, F.R.C.S. (Eng.).

I beg to report on the work of the Male Venereal Clinic at the Royal Infirmary, under your control and that of the Ministry of Health, for the year ending December 31st, 1930.

During this period 655 patients presented themselves for diagnosis and treatment.

By clinical examination 207 were apparently suffering from syphilis and 448 from gonorrhœa. Of these, 10 patients were proved to be suffering from both acute gonorrhœa and syphilis. 167, after repeated clinical and pathological examinations, were found to be non-venereal; 129 having been suspected of suffering from gonorrhœa and 38 from syphilis.

483 were City patients; 172 were County patients.

Of the City cases, 134 were syphilis; gonorrhœa, 232; the remainder being non-venereal.

18,268 attendances were made by patients on the books; of these 5,456 received treatment for syphilis, 12,250 for gonorrhœa. 14,807 were City patients, and 3,461 County patients. 6,189 of these attendances were at times other than when the clinic was in session, for irrigations and other intermediate treatment. 5,746 attendances were by City patients and 443 by County patients.

In every case treated the blood and discharges were submitted for pathological and bacteriological tests for the purpose of diagnosis, aid to treatment, evidence of progress, and proof of recovery. The cerebro-spinal fluid in some cases of neurosyphilis was submitted to Wasserman and other tests.

To patients suffering from syphilis, 3,118 intravenous or intramuscular injections of Salvarsan substitutes and 977 muscular injections of mercurial cream were administered, 3,185 for City patients and 910 for County patients.

To patients suffering from gonorrhœa, 11,600 intraurethral irrigations, anterior and posterior, were given, and instrumentation, instillation, vaccines, prostatic and urethral massage were practised, as necessary treatment in a large percentage of these cases.

In-Patients.

77 patients were admitted to the wards, 50 being City and 27 being County patients; 17 were highly infectious; 8 cases acute epididymitis; 3 on admission and 5 arose in course of treatment; 4 gonorrhœal rheumatism, and 3 acute prostatitis. 1 case of gonorrhœal ophthalmia. 2 cases of chronic syphilis were admitted, suffering from disease of spinal cord and heart. No case of jaundice was admitted, but 2 slight cases of arsenical dermatitis. 50 operations were performed under anæsthesia.

Results.

The number of patients who ceased attendance before completing the first course of treatment were :—

Syphilis ..	..	..	..	35
Gonorrhœa ..	..	..	..	47

Who ceased attendance after completing one or more courses, before completion of treatment necessary :—

Syphilis ..	..	..	..	33
Gonorrhœa ..	..	..	..	23

Who ceased attendance after completion of treatment, but failed to submit themselves to final tests :—

Syphilis ..	..	..	..	41
Gonorrhœa ..	..	..	..	44

Transferred to other clinics :—

Syphilis ..	..	..	..	20
Gonorrhœa ..	..	..	..	47

Transferred from other clinics :—

Syphilis ..	..	..	..	16
Gonorrhœa ..	..	..	..	34

Those who completed treatment and submitted themselves to repeated tests, and were clinically and pathologically proved to be cured :—

Syphilis ..	..	..	..	28
Gonorrhœa ..	..	..	..	181

The patients described as cured are submitted to exhaustive tests, in accord with the Rules laid down by the Ministry of Health.

Points of Material Interest.

The new patients presenting themselves for treatment show an increase of 3 over those of last year.

Special Note.—A serious outbreak of virulent syphilis occurred during 1929. This outbreak, in most instances, was accompanied by a virulent form of actively infective organisms in addition to the spirochoeta pallida. It is satisfactory to note that the number of new infections, viz., 77, have slightly decreased and the virulence and complications are less severe.

It is highly satisfactory to note that an increase of those suspecting themselves should have come to the clinic to find that they are free from evidences of either of these diseases.

Every effort has been made to persuade and encourage patients to persist in their attendances for treatment until all symptoms have disappeared and the necessary tests have been made to prove their cure complete.

My official assistant, Dr. Atkinson, and Dr. Dickinson have attended the Clinic regularly, giving valuable help in the treatment of the patients.

The City and County Medical Officers of Health, Dr. Millard and Dr. Fairer, have paid official visits of inspection during the year.

The Board of Governors of the Royal Infirmary have afforded me every assistance and facility for the efficient working of the clinic, and the new In-Patient Department for Venereal Diseases is of great assistance in the general treatment of the In-Patients and those requiring intermediate attention.

My thanks are due to my Medical and Lay Helpers for their zealous and loyal support in the conduct of the clinic.

I am, ladies and gentlemen,

Yours faithfully,

HENRY J. BLAKESLEY, F.R.C.S., Eng.,

Medical Officer in Charge of
Male Venereal Clinic, Leicester
Royal Infirmary.

31st January, 1931.

2.—Report on Female V.D. Clinic for Year 1930.

By BESSIE W. SYMINGTON, M.D., B.S. (Lond.).

The total number of patients seen for the first time was 378, viz. :—

115 suffering from syphilis.

170 „ „ gonorrhœa ;

93 showing no signs of venereal disease.

Under the last category are included all cases examined as contacts :—

(a) Children of infected mothers.

(b) Mothers of infected children.

(c) Wives of infected husbands.

(d) Babies of mothers treated during pregnancy.

The number of City patients examined for the first time was 279, viz. :—

83 suffering from syphilis.

129 „ „ gonorrhœa ;

67 showing no signs of venereal disease.

Out-Patients.

The total number of attendances of all patients was 9,133. 6,956 were seen by the Medical Officers at the Clinics, and 2,177 were seen at other times for prescribed treatment.

The total attendances of City patients numbered 6,915. Of these 2,722 attended for syphilis and 3,992 were for gonorrhœa. 201 attendances were made by patients not suffering from venereal disease.

Syphilis.

Treatment has been by :—

(a) Injection ;

(b) Drugs given by mouth ;

(c) Inunction.

The chief drug used is Neokharsivan administered by intravenous injection. This is given as routine to all adults, and also to children when the intravenous method can be used.

Stabilarsan is given in some cases.

Sulfarsenol, Bismuth (hypoloid), Thiostab, and Intramine, have been given by the intramuscular method.

The aggregate number of injections given at all the Clinics, male and female—City and County—was 6,348, and of these 1,550 were given to female patients from the City.

Mercury, potassium iodide, and bismuth have been given by mouth at the same time.

The increase of early infectious cases of syphilis is still very marked.

This year 29 cases were diagnosed ; this is more than double the number of those dealt with last year.

Gonorrhœa.

During 1930 the number of cases has again increased. Treatment carried out has been :—

- (1) **Local**—by disinfection of vagina, cervix and urethra, by
 - (a) Dressings, tampons, douches or pessaries ;
 - (b) Irrigation of the bladder. This is carried out in all suitable cases ;
 - (c) Instillation of glycerine into the body of the womb. This is done in certain cases.

(2) **General**.—Treatment for anæmia caused by the disease is always given ; iron and emulsions are chiefly used ; alkalies are given in acute cases and vaccines are given in special cases.

In-Patients.

The total number of days of in-patient treatment in 1930 was 2,960. Of these

746 were given to patients suffering from syphilis.

1,919 were given to patients suffering from gonorrhœa.

295 were days of treatment given to babies born in the maternity ward.

164 cases were admitted during the year :—

61 suffering from syphilis ;

83 „ „ gonorrhœa ;

20 were babies born in the maternity ward and this year none have shown signs of infection. All the mothers were treated before admission.

Amongst the cases admitted were :—

1 case of abdominal operation performed for serious complications of gonorrhœa.

3 cases of dilatation and curettage for chronic endometritis after long local treatment for gonorrhœa.

2 cases of abscess of Bartholine's Gland opened under anæsthesia. All the others were done in the out-patient department.

26 cases of salpingitis for rest and treatment without operation.

4 cases of acute gonorrhœal rheumatism.

11 cases of primary syphilitic sore, with secondary manifestations.

13 children under the age of 9 years with acute gonorrhœal vulvo-vaginitis.

3 cases of ophthalmia neonatorum, treated by advice of the Ophthalmic Surgeon.

2 cases of jaundice and

2 cases of arsenical dermatitis were admitted.

1 case of serious nephritis.

1 case of intrathecal injection.

The number of cases discharged after completion of treatment has been 179. 32 cases were transferred for continuation of treatment to other Clinics.

BESSIE W. SYMINGTON,
Medical Officer of Female V.D. Clinic.

3.—Report on Work for Venereal Diseases at St. Mary's Home, 1 Ashleigh Road, for Treatment of City Patients, 1930.

The cases dealt with in this department are young unmarried girls under 23 years of age.

The work is carried out in three parts :—

- (1) Work in the hostel containing 9 beds, 4 being kept specially for maternity cases, with cots for the babies.
- (2) Work in the Clinic held weekly.
- (3) Daily work carried out by the Sister-in-Charge as prescribed.

The total number of new cases admitted to the Hostel was 31. 10 of these were maternity cases. From the City 15 and 2 babies were dealt with.

The total number of new cases treated as out-patients was 42.

11 City cases and one baby were discharged from the Hostel and are continuing treatment in the Clinic.

Of the 15 City cases :—

- 2 were suffering from syphilis only.
- 5 „ „ „ gonorrhœa and syphilis.
- 8 „ „ „ gonorrhœa only.

The number of cases of primary syphilis admitted was 6.

Out-Patients.

2,042 attendances have been made. Of these 1,405 attendances for individual attention by Medical Officer ; 637 for treatment as prescribed.

The total number of injections given has been 164.

Discharged cases are visited when possible by an outdoor visitor, and the mothers are encouraged to bring up the babies to be seen at intervals by the Sister-in-Charge.

BESSIE W. SYMINGTON, M.D., B.S. (Lond.).

APPENDIX VIII.

STATISTICAL TABLES.

TABLE 1.

MUNICIPAL WARDS. VITAL STATISTICS, 1930.

WARD. (1)	No. of Inhabited Tenements, Jan., 1931. (2)	Estimated Population, Jan., 1931. (3)	No. of Persons per Tenement, Census, 1921. (4)	Births (corrected). (5)	Deaths. (6)	Deaths under 1 year. (7)
1. St. Martin's	478	1,921	4.02	26	22	1
2. Newton	2,095	8,694	4.15	131	86	7
3. St. Margaret's	3,065	12,842	4.19	215	142	17
4. Wyggeston	3,360	14,582	4.34	328	192	18
5. Latimer	3,950	18,328	4.64	275	203	20
6. Charnwood	1,966	8,217	4.18	110	92	7
7. Wycliffe	2,629	10,516	4.00	105	185	11
8. De Montfort	1,635	7,112	4.35	56	83	4
9. The Castle	3,124	13,183	4.22	184	157	7
10. Westcotes	7,204	29,176	4.05	401	275	24
11. The Abbey	5,345	24,640	4.61	282	250	12
12. Belgrave	4,774	20,671	4.33	314	180	16
13. West Humberstone	5,211	24,387	4.68	323	223	22
14. Spinney Hill	7,346	31,000	4.22	414	269	19
15. Knighton	5,377	20,916	3.89	190	193	6
16. Aylestone	5,231	24,481	4.68	415	192	24

TABLE 2.
MUNICIPAL WARDS. VITAL STATISTICS, 1930.

WARD.	Birth-rate.	Death-rate.	Infant Mortality.	Zymotic rate.	Phthisis rate.	Average Phthisis Rate, Years 1912-21.	Average Phthisis Rate, Years 1922-30.
1. St. Martin's ..	13.5	11.4	38	—	0.52	1.34	1.08
2. Newton ..	15.0	9.8	53	0.23	1.15	1.77	1.46
3. St. Margaret's ..	16.7	11.0	79	0.54	1.32	1.87	1.50
4. Wyggeston ..	22.4	13.1	54	0.27	1.50	1.77	2.07
5. Latimer ..	15.0	11.0	72	0.32	1.03	1.55	1.37
6. Charnwood ..	13.3	11.1	63	0.36	1.33	1.46	1.22
7. Wycliffe ..	9.9	17.5	104	0.28	0.76	1.19	0.92
8. De Montfort ..	7.8	11.6	71	—	0.70	0.76	0.67
9. The Castle ..	13.9	11.9	38	0.30	0.98	1.11	1.37
10. Westcotes ..	13.7	9.4	59	0.30	0.61	0.99	0.93
11. The Abbey ..	11.4	10.1	42	0.60	0.97	1.22	1.07
12. Belgrave ..	15.1	8.7	50	0.19	0.82	1.11	0.94
13. West Humberstone ..	13.2	9.1	68	0.08	0.73	1.52	1.03
14. Spinney Hill ..	13.3	8.6	45	0.29	0.64	0.92	0.87
15. Knighton ..	9.0	9.2	31	0.14	0.23	0.60	0.58
16. Aylestone ..	16.9	7.8	57	0.32	0.73	0.87	0.86

TABLE 3.
Deaths in each Ward, classified for Age and Cause, 1930.

WARD.																					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
		0 to 1 year.	1 to 5.	5 to 60.	Over 60 years.	Total all ages.	Influenza.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Typhoid Fever.	Other Zymotics.	Total.	Diarrhoea.	Phthisis.	Respiratory Diseases.	Developmental Disease.	Cancer.	Total.	
1. St. Martin's	1	2	8	11	22	..	..	..	..	..	..	..	..	..	1	4	15	2	22	
2. Newton	7	7	33	39	86	..	..	..	..	1	..	1	2	3	10	15	46	10	86	
3. St. Margaret's	17	4	53	68	142	..	1	..	..	1	..	4	7	5	17	19	80	14	142	
4. Wiggston	18	10	73	91	192	1	..	..	1	..	..	2	4	3	22	31	106	26	192	
5. Latimer	20	2	76	105	203	..	1	..	1	2	..	2	6	3	19	30	120	25	203	
6. Charnwood	7	5	36	44	92	1	..	1	..	..	..	1	3	1	11	11	56	10	92	
7. Wycliffe	11	2	48	124	185	1	..	1	..	..	..	1	3	4	8	31	114	25	185	
8. De Montfort	4	..	29	50	83	..	..	..	..	..	..	..	..	..	5	8	56	14	83	
9. The Castle	7	1	58	91	157	3	..	..	..	..	..	1	4	..	13	19	98	23	157	
10. Westcotes	24	2	98	151	275	7	..	..	..	..	..	2	9	2	18	41	171	34	275	
11. The Abbey	12	8	90	140	250	8	1	..	..	..	..	6	15	2	24	31	142	36	250	
12. Belgrave	16	3	71	90	180	..	..	..	2	..	..	2	4	1	17	33	105	20	180	
13. West Humblestone	22	4	86	111	223	..	..	..	2	..	..	..	2	..	18	21	138	44	223	
14. Spinney Hill	19	6	89	155	269	3	..	..	2	..	..	4	9	3	20	30	171	36	269	
15. Knighton	6	3	53	131	193	1	..	..	..	..	1	1	3	2	5	16	133	34	193	
16. Aylestone	24	10	72	86	192	1	1	..	..	2	..	4	8	2	18	24	120	20	192	
Infirmary	44	24	226	91	385	..	..	..	..	..	..	7	7	7	8	47	256	60	385	
City General Hospital	19	12	123	318	472	1	..	..	2	..	..	4	7	11	52	49	293	60	472	
City Mental	22	24	46	..	..	..	..	..	..	..	..	..	5	5	33	3	46	
Isolation Hospital	4	12	42	3	61	..	..	2	..	6	..	10	18	1	22	8	12	..	61	

Deaths in Institutions have been subtracted from the Wards in which the Institutions are situated; and (except in the case of the Workhouse and Mental Hosp.) have been distributed to the Wards to which they belong. Deaths of persons transferred from the Workhouse to the City General Hospital, however, have not been distributed, as the home addresses of such persons are not obtainable.

TABLE 4.
(As required by Ministry of Health).

TUBERCULOSIS.

NOTIFICATIONS ON FORM A.

No. of Primary Notifications.

Age Periods.	Pulmonary.		Non-Pulmonary.	
	Males.	Females.	Males.	Females.
0—1	—	—	1	2
1—5	1	3	5	3
5—10	33	17	7	6
10—15	11	24	5	3
15—20	23	24	7	3
20—25	48	37	1	2
25—35	76	66	5	5
35—45	48	34	2	1
45—55	48	25	2	1
55—65	20	10	1	1
65 and upwards ..	3	3	—	—
Total Primary Notifications	311	243	36	27
Total Notifications on Form A.	380	280	45	33

NOTIFICATIONS ON FORM B.

Under 5	—	—	—	—
5—10	—	—	1	1
10—15	1	—	—	—
Total Primary Notifications	1	—	1	1
Total Notifications on Form B.	1	—	1	1

NUMBER OF NOTIFICATIONS ON FORM C.

Poor Law Institutions	—	—	—	—
Sanatoria	28	18	—	—
	(258)	(220)	(16)	(13)

The total number of fresh cases notified during 1930 on Forms A. and B., excluding cases previously notified, was:—

Pulmonary	582
Non-Pulmonary	66
Total	648

TABLE 4a.

TUBERCULOSIS CASES.

Supplemental Return.

Age Periods.			Pulmonary.		Non-Pulmonary.	
			Males.	Females	Males.	Females.
0—1	..	..	1	..	2	1
1—5	..	..	4	..	5	3
5—10	..	..	1	2	2	2
10—15	..	..	4	3	..	1
15—20	..	..	1	5	2	2
20—25	..	..	2	2	..	1
25—35	..	..	2	4	..	..
35—45	..	..	4	5	..	..
45—55	..	..	5	..	..	1
55—65	..	..	5	..	..	..
65 and upwards	..	..	3	1	..	..
Total Cases	..	..	32	22	11	11

TABLE 5.

Showing Number of Deaths from Tubercular Diseases
in Leicester in past years.

Year (1)	Phthisis.		Other Tuberculous Diseases.		Total Tuberculous Deaths.	
	Deaths. (2)	Rate per 100,000 Population. (3)	Deaths. (4)	Rate per 100,000 Population. (5)	Deaths. (6)	Rate per 100,000 Population. (7)
*1903	266	123	111	51	377	175
1904	353	163	96	44	449	207
1905	288	132	87	40	375	171
1906	339	154	71	32	410	187
1907	275	124	99	44	374	169
1908	287	128	104	46	391	175
1909	290	129	82	36	372	166
1910	281	124	77	34	358	158
1911	288	126	66	28	354	155
1912	284	123	89	38	373	162
1913	301	130	82	35	383	165
1914	273	117	88	37	361	155
1915	325	143	76	33	401	177
1916	306	135	67	29	373	165
1917	343	157	78	35	421	193
1918	316	145	82	37	398	182
1919	264	111	62	26	326	138
1920	255	107	72	30	327	138
1921	278	116	73	30	351	147
1922	294	123	67	28	361	151
1923	285	118	36	15	321	133
1924	287	118	62	25	349	143
1925	305	125	59	24	364	150
1926	282	116	43	17	325	134
1927	283	115	63	26	346	141
1928	265	107	42	17	307	124
1929	266	108	53	21	319	130
1930	227	92	44	18	271	110

War Years.

* The rates for the years 1903-10 were revised in the light of the 1911 Census.

† The rate for the year 1920 was revised in the light of the 1921 Census.

TABLE 6.

Age and Sex Distribution of Deaths from Phthisis in 1930.

Age Period.	Males.	Females.	Total.
0—1	2	1	3
2—4	4	..	4
5—9 .. ..	..	..	..
10—14	1	2	3
15—19	4	10	14
20—24	15	20	35
25—34	28	23	51
35—44	32	15	47
45—54	30	8	38
55—64	16	9	25
65 and upwards ..	5	2	7
All ages ..	137	90	227

Occupations of Persons Dying from Phthisis in 1930.

	M.	F.		M.	F.
SHOE TRADE :					
Finishers	6	..	Army Pensioners ..	2	..
Clickers	9	..	Boxmakers	1	..
Riveters .. ..	..	..	Porters	1	..
Pressmen	3	..	Licensed Victuallers ..	3	..
Machinists	13	5	Shop Assistants	3	..
Various	5	2	Warehousemen .. ..	..	..
Total in Shoes ..	36	7	Various	41	2
*Hosiery Trades ..	6	18	Occupations not stated		
Labourers	17	..	(includes Married		
Clerks	4	4	Women, Widows,		
Tailoring Trade ..	..	..	Children and Per-		
Vanmen	7	..	sons of no occupa-		
Soldiers	1	..	tion)	9	59
Engineers	5	..	Total	137	90
Painters	1	..			
Dressmakers .. ..	..	..	

* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.

TABLE 7.

Showing the number of Cases notified of the principal Notifiable Diseases for the
Fourteen Years, 1917-1930.

DISEASE.	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Smallpox ..	0	0	0	0	0	0	0	5	72*	0	6*	90*	320*	1192
Scarlet Fever..	573	583	579	946	714	619	576	335	774	477	620	1971	517	423
Diphtheria ..	128	154	272	471	324	168	142	429	350	366	309	461	253	198
Enteric Fever ..	3	34	30	15	27	9	6	5	4	3	3	6	2	5
Erysipelas ..	114	101	131	127	84	101	87	96	126	110	132	141	158	99
Puerperal Fever ..	4	6	11	18	21	12	7	11	7	22	9	10	11	12
Puerperal Pyrexia ..	..	..	..	..	..	..	..	..	..	21	34	45	25	50
Phthisis ..	655	746	658	572	497	566	692	725	606	650	700	668	657	582
Other Forms of Tubercle ..	98	82	47	59	105	43	71	65	77	77	80	117	77	66
Ophthalmia ..	66	51	101	101	87	66	53	28	37	36	38	24	35	32
Cerebro-Spinal Fever ..	4	2	4	7	4	0	3	2	2	4	4	4	8	11
Poliomyelitis ..	5	3	3	4	2	1	1	12	..	81	8	8	4	3
Measles ..	4572	1686	262	(Notification discontinued.)										
Encephalitis Lethargica ..	..	..	..	9	10	6	12	22	26	14	9	7	4	3
Pneumonia ..	..	..	..	131	138	177	209	247	239	143	236	239	364	202
Chickenpox ..	..	..	..	..	..	..	..	..	639	..	..	..	..	..
Totals ..	6222	3448	2098	2460	2013	1768	1859	1982	2959	2004	2188	3791	2435	2878

* The figures include cases discovered by the Medical Officer of Health.

TABLE 8.

Showing the number of Deaths from Zymotic (or Germ) Diseases in the Fourteen Years 1917-1930.

DISEASE.	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Smallpox ..	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Measles ..	98	59	1	83	7	48	21	0	43	8	18	1	17	5
Scarlet Fever ..	3	5	2	2	1	7	2	4	10	5	3	4	2	2
Diphtheria ..	18	15	30	41	28	20	9	35	34	37	11	17	13	7
Whooping Cough ..	33	34	11	23	33	25	31	18	69	21	29	7	56	8
Enteric Fever ..	2	4	3	3	2	3	2	1	1	0	1	0	0	1
Diarrhoea ..	21	15	23	21	30	16	38	62	57	40	22	50	27	33
Enteritis ..	49	26	31	48	67	42	22	19	10	5	2	0	0	0
Erysipelas ..	5	1	6	0	5	1	2	8	10	9	5	0	0	0
Influenza ..	*	†	330	15	47	80	31	39	55	15	54	18	214	27
Puerperal Fever ..	0	6	4	8	6	5	3	3	7	11	2	7	3	8
Cerebro-Spinal Fever ..	2	1	8	6	3	3	0	0	3	5	2	0	4	4
Poliomylitis ..	1	1	2	0	1	1	0	0	0	7	2	0	0	1
Encephalitis Lethargica ..	..	..	..	6	5	4	4	7	10	9	7	3	12	8
Pneumonia ..	..	..	..	225	207	224	210	218	245	168	208	187	284	206
Totals ..	162	126	451	481	442	479	375	409	554	340	366	294	632	311

N.B.—In calculating the Zymotic rate since 1923, all the above deaths have been included except pneumonia. Particulars of deaths from Tuberculosis are given in Tables 5 and 6.

* Epidemic year. Deaths during epidemic, June to December, 877.

† Epidemic year. Deaths during epidemic, January to April, 1,279.

TABLE 9. Vital Statistics of whole District during 1930 and previous years. City of Leicester.

YEAR.	Population estimated to middle of each year, revised in light of 1921 Census.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Number of inhabited tenements, January, 1931 .. 62,790
Average number of persons per house, Census, 1921 .. 4.28

Area of District in acres (exclusive of
area covered by water) .. 8,582

NOTE.—This Table has been filled in in accordance with the instructions given on the form supplied by the Ministry of Health.

TABLE 10.

LEICESTER BOROUGH.

Showing estimated Population, Marriage-rates, Birth-rates, and Death-rates (General and Zymotic) per 1000 living during the last 82 years, 1849-1930.

Year. (1)	Estimated Population. (2)	Marriage Rate. (3)	Birth Rate. (4)	Death Rate. (5)	Zymotic (Death) Rate. (6)	Infant Mortality. (7)
1849	58,736	21.58	36.96	28.73	7.05	
1850	59,788	24.04	37.45	23.64	4.13	
1851	60,760	21.11	40.11	25.57	5.48	
1852	61,467	22.96	38.83	28.84	8.42	
1853	62,181	22.90	36.71	27.02	5.45	
1854	62,903	20.40	39.06	25.11	6.65	
1855	63,624	19.14	36.16	23.55	2.87	
1856	64,366	20.02	37.32	21.16	3.10	
1857	65,119	20.60	37.48	27.58	8.19	
1858	65,835	19.14	34.54	28.76	8.07	
1859	66,663	22.56	37.77	24.59	4.99	
1860	67,456	19.80	38.05	20.47	1.27	
1861	68,638	18.58	37.01	25.25	5.71	
1862	70,986	21.30	38.07	23.38	3.01	
1863	73,413	25.74	40.00	29.95	7.96	
1864	75,922	25.68	41.01	26.96	5.41	
1865	78,516	25.38	41.09	25.02	5.20	208.9
1866	81,197	24.94	42.02	23.33	3.37	205.1
1867	83,970	22.18	41.66	24.59	4.31	226.2
1868	86,837	22.62	41.32	28.15	7.88	256.6
1869	89,804	21.12	41.87	25.60	5.10	229.0
1870	92,873	21.22	40.90	27.33	7.24	235.2
1871	95,823	23.06	41.55	26.07	5.83	252.4
1872	98,251	23.90	42.36	26.95	8.23	231.3
1873	100,741	24.00	44.14	23.83	5.05	208.4
1874	103,294	20.90	42.34	24.29	3.83	222.6
1875	105,913	22.36	40.31	27.28	6.56	242.0
1876	108,599	22.64	44.02	23.58	5.26	199.9
1877	111,355	21.24	42.68	23.48	3.21	188.7
1878	114,182	19.38	41.85	21.89	4.18	205.2
1879	117,083	19.48	40.11	22.64	3.06	187.3
1880	120,059	19.60	40.04	24.73	6.48	220.1
1881	123,146	18.66	38.26	21.55	4.45	204.8
1882	116,275	19.02	38.46	20.04	3.23	194.4
1883	129,483	18.64	37.26	19.18	2.56	190.7
1884	132,773	17.3	36.5	22.1	4.2	233.5
1885	136,147	16.3	34.3	19.3	3.3	193.5
1886	139,606	17.4	34.8	19.6	2.8	216.5
1887	143,153	16.6	32.7	19.1	3.0	215.8
1888	146,790	15.4	32.7	18.1	2.4	204.7
1889	150,520	16.0	31.8	16.6	2.3	209.6

TABLE 10—Continued.

Year. (1)	Estimated Population. (2)	Marriage Rate. (3)	Birth Rate. (4)	Death Rate. (5)	Zymotic (Death) Rate. (6)	Infant Mortality. (7)
1890	154,344	16.5	30.4	17.7	2.1	203.7
*1891	†177,353	19.1	33.5	21.2	3.3	214.5
1892	180,550	16.7	32.2	18.0	2.5	197.7
1893	183,900	15.8	32.6	19.7	3.5	220.4
1894	187,250	16.7	32.0	14.5	1.9	161.9
1895	190,600	16.4	31.2	17.4	3.0	206.6
1896	194,100	17.5	32.0	16.8	2.9	185.7
1897	197,600	16.7	31.6	17.9	1.9	206.0
1898	201,250	17.7	30.5	17.2	3.4	191.1
1899	204,900	17.5	30.6	18.1	3.4	196.0
1900	208,600	17.3	29.7	17.8	3.6	174.1
1901	212,498	17.1	29.0	15.7	2.3	178.0
1902	213,974	16.3	29.5	14.8	1.5	153.3
1903	215,461	16.5	27.9	14.2	1.4	161.3
1904	216,958	17.0	27.5	15.0	2.0	161.1
1905	218,464	17.2	26.9	14.0	1.6	146.5
1906	219,980	16.1	26.6	15.1	2.4	166.2
1907	221,508	16.6	24.9	13.4	.9	130.1
1908	223,046	16.0	25.4	13.9	1.6	129.7
1909	224,595	15.7	24.1	14.0	1.3	126.6
1910	226,154	17.1	23.7	12.4	.7	126.3
1911	227,634	16.6	22.9	13.4	1.4	130.0
1912	229,294	16.3	22.5	13.5	.9	109.0
1913	230,970	16.4	22.8	13.3	.7	119.3
1914	232,664	16.7	22.1	14.1	1.1	119.9
1915	232,664	24.1	20.8	14.9	.5	122.8
1916	225,907	18.3	20.7	13.6	.8	104.8
1917	217,537	16.6	16.9	13.5	.7	105.0
1918	217,537	18.6	14.9	17.8	.5	108.1
1919	236,059	21.3	15.3	13.0	.3	98.0
1920	236,874	23.5	24.9	12.1	.8	89.4
1921	237,900	20.0	21.4	12.0	.5	85.9
1922	238,800	19.3	19.4	12.7	.5	87.8
1923	239,700	18.1	19.16	11.57	.4	84.0
1924	241,800	17.4	18.47	12.12	.7	79.0
1925	242,100	17.6	17.33	12.90	1.3	87.6
1926	241,700	16.9	17.02	12.30	.7	77.4
1927	245,000	17.6	16.18	12.42	.5	75.1
1928	246,000	18.99	16.21	11.17	.2	70.7
1929	245,200	19.17	15.29	13.94	1.3	80.3
1930	245,200	17.96	15.80	11.20	.42	55.7

* All figures after 1891 refer to extended Borough.

† This is the population of the extended Borough. The figures in the other columns for the same year refer to the old Borough.

The figures since 1892 have been revised in the light of the census figures of the different census years—1901, 1911 and 1921. The population for the year 1920 having been considerably over-estimated has necessitated important corrections in that year.

TABLE 11. City of Leicester.

INFANT MORTALITY DURING THE YEAR 1930.

Net Deaths from stated Causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 Week	1 to 2 Weeks	2 to 3 Weeks	3 to 4 Weeks	Total under 1 Month	1 to 3 Months	3 to 6 Months	6 to 9 Months	9 to 12 Months	Total Deaths under 1 Year
All Causes Certified.	94	7	5	6	112	27	28	36	13	216
Smallpox .. .. .	..	..	..	..	..	..	1	..	..	1
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..
Measles .. .. .	..	..	..	..	..	..	..	1	2	3
Spina bifida	2	..	1	..	3	..	..	..	..	3
Whooping-cough .. .. .	..	..	..	..	..	..	..	5	1	6
Diphtheria and Croup .. .. .	..	..	..	..	..	..	..	..	..	..
Erysipelas .. .. .	..	..	..	..	..	..	..	..	..	..
{ Tuberculous Meningitis .. .. .	..	..	..	..	..	..	..	3	..	3
{ Abdominal Tuberculosis .. .. .	..	..	..	..	..	..	..	..	..	..
{ Other Tuberculous Diseases .. .. .	..	..	..	..	..	..	1	3	1	5
Meningitis (<i>not Tuberculous</i>) .. .. .	..	..	..	..	..	..	..	2	1	3
Convulsions	2	..	..	1	3	2	6	1	..	12
Laryngitis .. .. .	..	..	..	..	..	..	..	..	..	..
Bronchitis .. .. .	..	..	..	..	..	2	1	1	..	4
Pneumonia (all forms) .. .. .	..	1	..	..	1	2	5	10	5	23
{ Diarrhœa .. .. .	..	3	..	..	3	6	9	7	1	26
{ Enteritis .. .. .	..	..	..	..	..	2	..	2	..	4
Colitis .. .. .	..	..	..	..	..	..	..	..	..	..
Gastritis .. .. .	..	..	..	..	..	..	..	..	..	..
Syphilis .. .. .	..	..	..	..	..	..	..	..	..	..
Rickets .. .. .	..	..	..	..	..	..	..	..	..	..
Suffocation (overlying)	3	..	..	..	3	..	..	..	..	3
Injury at Birth	6	..	..	..	6	..	..	..	..	6
Atelectasis	4	..	..	..	4	..	..	..	..	4
{ Congenital Malformations.. .. .	12	1	..	..	13	2	2	..	..	17
{ Premature Birth	45	2	2	1	50	3	2	..	..	55
{ Atrophy, Debility and Marasmus	20	..	1	4	25	2	..	..	..	27
Other Causes .. .. .	..	..	1	..	1	6	1	1	2	11

Net Births in the Year / legitimate, 3,654.
 / illegitimate, 218.

Net Deaths in the Year of / legitimate infants, 202.
 / illegitimate infants, 14.

TABLE 12.

VENEREAL DISEASE.

Form V.D. (R.), as required by Ministry of Health.

Return relating to all persons who were treated at the Treatment Centre at Leicester Royal Infirmary during the year ended the 31st December, 1930.

	Syphilis.		Gonorrhœa.		Conditions other than Venereal.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1. Number of cases which— (a) at the beginning of the year under report were under treatment or observation for (b) had been marked off in a <i>previous year</i> as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report <i>suffering from the same infection</i>	187	181	227	78	12	6	426	265
	9	8	3	6	..	..	12	14
TOTAL—Items 1 (a) and 1 (b)	196	189	230	84	12	6	438	279
2 (a). Number of cases dealt with at the Treatment Centre during the year for the <i>first time</i> with infections of:— 1. <i>Less</i> than one year's standing 2. <i>More</i> than one year's standing	77 83	39 68	302 14	136 28	167 ..	93 ..	546 97	268 96
TOTAL—Items 1 (a), 1 (b) and 2 (a)	356	296	546	248	179	99	1081	643
2 (b). Number of cases included in Item 2 (a) known to have received <i>previous treatment at other Centres</i> for the same infection	16	6	34	12	..	..	50	18

3. Number of cases which ceased to attend— (a) before completing the first course of treatment for (b) after one or more courses but before completion of treatment for (c) after completion of treatment, but before final tests as to cure of	35	27	47	32	..	..	82	59
4. Number of cases transferred to other Treatment Centres after treatment for	33	21	..	..	..	..	33	21
5. Number of cases discharged after completion of treatment and observation for	41	30	67	31	..	..	108	61
6. Number of cases which, at the end of the year under re- port, were under treatment or observation for	20	12	47	20	..	..	67	32
	28	13	181	67	179	99	388	179
	199	193	204	98	..	..	403	291
TOTAL—Items 3, 4, 5, and 6	356	296	546	248	179	99	1081	643
7. Out-patient attendances— (a) For individual attention by the Medical Officer (b) For intermediate treatment, <i>e.g.</i> , irrigation, dress- ings, &c.	5181	4079	6385	2701	513	176	12079	6956
TOTAL ATTENDANCES	275	50	5865	2114	49	13	6189	2177
	5456	4129	12250	4815	562	189	18268	9133
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from	540	746	671	1919	..	295	1211	2960

	For detection of			For Wassermann Reaction.
	Spirochetes.	Gonococci.	Other Organisms.	
9. Examinations of Pathological material— (a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre (b) Specimens from persons attending at the Treat- ment Centre which were sent for examination to an approved laboratory	192	4712	8	3856

TABLE 12a.

VENEREAL DISEASE.

Form V.D. (R.), as required by Ministry of Health.

Statement showing the services rendered at the Treatment Centre during the year 1930, classified according to the areas in which the patients resided.

	Leicester.	Leicester-shire.	Rutland.	Warwick-shire.	Northamptonshire.	Stafford-shire.	TOTAL.
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from :—							
Syphilis	205	62	..	..	..	..	267
Soft Chancre .. .. .	..	..	..	..	..	..	..
Gonorrhœa	355	125	..	..	..	..	480
Conditions other than Venereal	184	76	..	..	..	..	260
Total	744	263	..	..	..	..	1007
B Total number of attendances of all patients residing in each area	21722	5679	..	..	..	..	27401
C. Aggregate number of " In-patient days " of all patients residing in each area	2913	1258	..	..	..	..	4171
D. Number of doses of arsenobenzol compounds given in the :—							
1. Out-patient Clinic	3907	1477	..	..	..	..	5384
2. In-patient Department	37	17	..	..	..	..	54
to patients residing in each area.							

TABLE 13.

VENEREAL DISEASE CLINICS AT ROYAL INFIRMARY.

NEW CASES AND RENEWED ATTENDANCES. (City Cases only.)

YEAR.	NEW PATIENTS.				RENEWED ATTENDANCES.			
	MALES.		FEMALES.		MALES.		FEMALES.	
	SYPH.	GON.	SYPH.	GON.	SYPH.	GON.	SYPH.	GON.
*1917	101	138	79	99	696	1285	413	674
1918	125	184	166	90	1313	2759	1429	1058
1919	218	374	184	35	1934	4319	1741	631
1920	205	250	181	56	3426	5360	2081	812
1921	168	198	208	45	3707	4423	3030	944
1922	148	179	149	29	3725	4026	2456	1448
1923	111	198	123	66	3465	4859	2948	2279
1924	93	166	119	98	3595	5528	2516	2364
1925	66	202	72	84	3446	7228	2245	2143
1926	99	291	90	118	3123	8323	2143	2428
1927	70	275	75	102	3164	9761	2557	2591
1928	71	246	104	136	2946	10420	2970	3619
1929	125	266	80	126	3321	10085	2529	4372
1930	134	232	83	129	4125	9778	2639	3803

*Nine Months only.

TABLE 14.
CANCER STATISTICS, 1903-30.

Year.	Total Cancer Deaths.	Cancer Deaths— per cent of Total Deaths.	Cancer Death- rate per 100,000 Population.
1903	192	6.2	89
1904	213	6.5	98
1905	180	5.8	82
1906	168	5.0	76
1907	199	6.6	89
1908	214	6.8	95
1909	195	6.1	86
1910	200	7.1	88
1911	236	7.7	103
1912	226	7.2	98
1913	252	8.1	109
1914	269	8.1	115
1915	219	6.4	94
1916	228	7.3	100
1917	255	8.6	117
1918	309	7.9*	132
1919	249	8.0	108
1920	257	8.9	104
1921	307	10.6	129
1922	276	9.0	116
1923	274	9.8	114
1924	281	9.5	116
1925	318	10.1	131
1926	395	13.2	163
1927	324	10.6	132
1928	349	12.7	142
1929	357	10.4	145
1930	372	13.5	151

*In 1918 the total deaths from all causes were very high so that the per cent. figure was proportionately lower.

TABLE 15. DEATHS FROM CANCER, 1930.

Classified according to Age, Sex and Organ Affected.

Organ Affected.	Under 40 years		40-60 years.		Over 60 years.		All Ages.	
	M.	F.	M.	F.	M.	F.	M.	F.
Lip	—	—	—	—	3	—	3	—
Tongue	—	—	1	—	6	—	7	—
Jaw	—	—	—	—	2	—	2	—
Mouth	—	—	—	—	2	—	2	—
Larynx	—	—	4	1	4	—	8	1
Oesophagus	—	—	—	—	7	1	7	1
Stomach	—	1	9	10	15	17	24	28
Intestines	—	—	—	—	2	4	2	4
Colon	—	2	1	5	13	15	14	22
Rectum	—	—	4	3	14	9	18	12
Liver	—	1	4	5	14	11	18	17
Pancreas	—	—	3	2	4	8	7	10
Spleen	—	—	—	1	—	—	—	1
Lungs	1	—	2	5	1	1	4	6
Kidney	—	—	2	—	1	—	3	—
Bladder	—	—	1	—	6	—	7	—
Prostate	—	—	—	—	13	—	13	—
Testicle	—	—	—	—	—	—	—	—
Ovary	—	—	—	5	—	1	—	6
Uterus	—	3	—	12	—	14	—	29
Breast	—	1	—	24	—	24	—	49
Bones	—	—	—	—	—	—	—	—
Other Forms or not specified	1	2	7	7	15	15	23	24
Total	2	10	38	80	122	120	162	210

TABLE 16.—Midwives practising in Leicester, 1930.

REG. NO.	NAME.	ADDRESS.
* 63759	Allcock, Winifred	1 Spence Street.
* 32386	Adecock, Hannah	56 Clarendon Park Road.
† 2760	Blyth, Eliza	13 Fairfield Street.
* 42983	Bamber, Mabel	12 Portinan Street.
* 71975	Ball, Mabel	Westcotes Maternity Home.
* 55200	Bradshaw, Edith	Westcotes Maternity Home.
* 66160	Bruce, Annie	Westcotes Maternity Home.
* 70843	Blucher, Emma	Fosse Road Nursing Home.
* 79367	Bryan, Georgina L.	Sundial Nursing Home, Aylestone Road.
† * 25564	Coe, Lizzie	103 Down Street.
† * 73803	Carr, Beatrice	106 Kedleston Road.
* 57274	Camacho, M. S.	649 Aylestone Road.
* 74368	Carter, Marjorie	Sundial Nursing Home, Aylestone Road.
§ * 67186	Conlon, Elizabeth	Tweedbank, Bolsover Street.
* 35191	Chandler, Sarah K.	16 Lincoln Street.
* 36754	Dawkins, Jennima	1 Pool Road.
† * 66243	Dodson, Sarah	35 Windley Road.
* 72670	Davis, Catherine	14 Uplands Road, Southfields Drive.
* 50887	East, Florrie	11 New Bridge Street.
* 43711	Else, Charlotte	Maternity Hospital, Causeway Lane.
† * 67246	Eyre, Blanche	14 Lincoln Street.
§ * 68879	Eden, Lily	5 Thoresby Street.
* 51768	Fayerbrother, Jessie D.	58 Loughborough Road.
20974	Gawthorne, Fanny	45 Aylestone Road.
* 45160	Gardner, Gertrude	3 Elmfield Avenue.
* 77225	Gordon, Mary E.	Fosse Road Nursing Home.
* 15683	Gray, Jean	Maternity Hospital, Causeway Lane.
* 75166	Haynes, Nellie E.	19 The Newark.
* 27110	Hosking, C. A.	53 Rancilife Terrace.
† * 26452	Heggs, Mary Louisa	Maternity Hospital, Causeway Lane.
† * 25486	Hunt, Annie	166 Charnwood Street.
† * 28009	Hill, Matilda	88 Knighton Lane.
5223	Howsam, Miriam	90 Sylvan Street.
† * 37583	Hicks, Louisa	58 Bassett Street.
§ * 60388	Harding, Laura	70 Lytton Road.
* 70351	Hurd, Hilda	34 Diseworth Street.
* 71043	Hopkins, Margaret	39 Hallam Crescent East.
* 55864	Holyoak, Elsie	187 Sheridan Street.
* 69581	Hill, Maria	56 Clarendon Park Road.
* 78299	Hughes, Elizabeth	Maternity Hospital, Causeway Lane.
* 79222	Hollingsworth, Margaret	Westcotes Maternity Home.
† * 41739	Ingham, Adelaide	58 Loughborough Road.
* 47677	Kent, Ethel Annie	103 Down Street.
* 4259	Kirk, Veronica	5 St. Peter's Road.
* 11389	Laughton, Annie	236 Clarendon Park Road.
* 51258	Ledger, Ellen	205 Birstall Street.
* 77108	Leman, Edna Doris	229 Melton Road.
* 39726	Lord, Helena	56 Clarendon Park Road.
† * 49841	McCaull, Jane	10 Shaftesbury Road.
§ * 67874	Martin, Rose	5 Earl Russell Street.
* 64981	Morgan, Eileen W.	193 Narborough Road.
* 41332	Martin, Lilian Maud E.	301 Clarendon Park Road.
* 65416	Nixon, Edith May	380 Fosse Road South.
† * 30688	Noon, Lucy	1 Spence Street.
† * 36784	Pilsworth, Maria	"Roma," Blackbird Road.
† * 49911	Potter, Frances	10 Shaftesbury Road.
* 43317	Payne, Lillian	7 Gipsy Road.
† * 67428	Pateman, Clara	20 Warwick Street.
* 72326	Payne, Letitia	193 Narborough Road.
* 67707	Phillips, M.	84 Lansdowne Road.
* 66629	Peel, Lilian M.	27 Strathmore Avenue.
* 78471	Pickering, Mona Doris	Maternity Hospital, Causeway Lane.
* 69226	Robertson-Ritchie, Ethel	15 Napier Street.
† * 67475	Rimcorn, Gertrude	41 Watson Street.
* 69217	Reading, Elsie May	Westcotes Maternity Home.
* 77256	Rimington, May	54 Kensington Street.
* 79864	Royce, Mary W.	Maternity Hospital, Causeway Lane.
* 28146	Sinister, E. Kemsey	36 Wood Hill.
* 75428	Smith, Lillie C. M.	Maternity Hospital, Causeway Lane.
† * 55034	Smith, Mary	32 Narborough Road.
* 58618	Starmer, Emma	7 Warwick Street.
* 69730	Smith, Edith	9 Laurel Road.
* 72390	Saunders, Rose	Waltham House, Saffron Lane.
* 33745	Smith, Sarah E.	87 Harrison Road.
* 79163	Smith, Emily	Maternity Hospital, Causeway Lane.
* 33774	Wakeling, Ada	47 Westmoreland Avenue.
† * 54561	Whinnett, Annie	40 Mill Hill.
* 24962	Wright, Catherine	193 Narborough Road.
† * 73062	Wyles, Violet	48 Hartopp Road.
* 77953	Whelan, Kathleen J.	Maternity Hospital, Causeway Lane.

* Holds Certificate of Central Midwives' Board.

† Holds Certificate of London Obstetrical Society.

‡ Trained at Maternity Hospital, Causeway Lane.

§ Trained at Municipal Maternity Home.

TABLE 17.

**MUNICIPAL MATERNITY HOME,
WESTCOTES DRIVE.**

Return relating to Maternity Homes maintained or subsidised by
the Council, as required by the Ministry of Health, for Year 1930.

Form M.C.W. 96a.

1. Name and Address of Institution:—				
Municipal Maternity Home, Westcotes Drive, Leicester.				
2. Number of beds in the Institution	..	..	..	26
3. Number of cases admitted during the year	..	..	..	475
4. Average duration of stay	..	..	..	14 days
5. Number of cases delivered by:—				
(a) Midwives	..	..	..	351
(b) Doctors	..	..	..	96
6. Number of cases in which medical assistance was sought by a midwife	..	..	..	133
7. Number of cases notified as:—				
(a) Puerperal Fever	..	..	..	4
(b) Puerperal Pyrexia	..	..	..	2
8. Number of cases of pemphigus neonatorum	..	..	..	—
9. Number of infants not entirely breast-fed while in the Institution	..	..	..	14
10. (a) Number of cases notified as ophthalmia neonatorum				3
(b) Result of treatment in each case.—Improved on discharge; to be attended at home by own doctor.				
11. (a) Number of maternal deaths	..	..	..	1
(b) Cause of death in each case.—Transferred to Royal Infirmary 12th day; died 8 weeks later, Puerperal Septicæmia.				
12. (a) Number of foetal deaths:—				
(i) Stillborn	..	..	..	14
(ii) Within 10 days of birth	..	..	..	8
(b) Cause of death in each case and results of post-mortem examination (if obtainable):—				
Prematurity, 4; Atelectasis, 2; Œdema Lungs due to Aspiration of Meconium, 1; Convulsions due to Cerebral Hæmorrhage, 1.				

TABLE 18.

City of Leicester.

MATERNITY HOME, WESTCOTES DRIVE.

**Income and Expenditure for the Two Years ending
31st March, 1931.**

	Year 1929-30.			Year 1930-31.		
EXPENDITURE.	£	s.	d.	£	s.	d.
Salaries	823	0	11	799	9	11
Superannuation : Corporation's Contributions	51	10	4	50	14	8
Insurance	40	6	9	39	8	1
Rates	238	13	4	250	6	10
Furniture and Equipment	113	15	7	83	9	7
Repairs, Painting, &c.	39	10	11	90	13	11
Fuel, Light and Water	515	2	7	533	9	4
Provisions	1087	15	3	1007	14	3
Drugs and Medical Requisites	159	8	3	241	9	8
Laundry and Cleaning Materials (excluding Wages)	250	0	5	208	17	4
Garden and Grounds	173	7	7	175	16	5
Clothing and Linen	126	6	8	152	13	0
Lecture Fees, &c.	113	7	6	102	13	6
Printing, Stationery, Postage and Telephone	37	0	10	38	13	2
Sundries	48	16	6	23	17	2
Loan Charges :—						
Interest	572	7	4	567	11	2
Repayment of Debt	430	8	0	430	8	0
Total Expenditure	£4820	18	9	£4797	6	0
INCOME.						
Maternity Fees	2488	2	6	2240	4	6
Training Fees	161	14	6	198	0	0
Rent of Garages, &c.	166	11	0	159	15	0
Sundries	0	0	10	1	8	3
Contribution by Ministry of Health in aid of Training of Midwives	90	0	0	165	0	0
Produce supplied by Garden to Institution	32	14	7	27	3	7
Total Income	£2939	3	5	£2791	11	4
Net Cost (including Loan Charges)	£1881	15	4	£2005	14	8

ALFRED RILEY,

City Treasurer.

20th June, 1931.

TABLE 19.

City of Leicester.

DAY NURSERY.

Income and Expenditure for the Two Years ending
31st March, 1931.

EXPENDITURE.	Year 1929-30.			Year 1930-31.		
	£	s.	d.	£	s.	d.
Salaries	709	8	6	715	6	8
Superannuation : Corporation's Contributions	30	6	6	37	2	3
Insurance	27	16	4	26	9	5
Rent and Rates	353	13	4	359	15	8
Furniture and Equipment	110	5	4	58	14	8
Repairs, Painting, &c.	59	19	1	51	0	1
Fuel, Light, Water and Cleaning	222	7	0	223	16	2
Provisions	658	3	4	607	10	1
Drugs and Medical Requisites	9	11	2	7	2	8
Laundry	110	11	5	139	7	4
Uniforms and Clothing	96	10	11	87	2	1
Printing, Stationery, Postage and Telephone	12	7	3	8	9	6
Lecture Fees .. .. .	..	..	..	31	10	0
Sundries	51	10	3	35	4	9
	£2452	10	5	£2388	11	4
INCOME.						
Maintenance Charges	838	4	10	734	10	7
Contribution from Education Committee in respect of Mothercraft :						
Tuition	150	0	0	150	0	0
Meals for School Girls	76	4	6	60	2	0
Meals for Mothers	30	4	0	20	0	0
	£1094	13	4	£964	12	7
Net Cost	£1357	17	1	£1423	18	9

20th June, 1931.

ALFRED RILEY,
City Treasurer.

TABLE 20.

City of Leicester.

INFANTS' MILK DEPOT.

Income and Expenditure for the Two Years ending
31st March, 1931.

	Year 1929-30.	Year 1930-31.
EXPENDITURE.		
Salaries and Wages	£ 406 18 8	£ 494 12 10
Superannuation: Corporation's Contributions	17 19 8	20 9 5
Purchase of Milk, &c... .. .	2585 12 6	2003 5 5
Medical Requisites, &c. .. .	53 12 0	41 5 11
Rent, Rates and Insurance .. .	71 10 1	102 2 8
Fuel, Light and Water .. .	33 8 9	43 17 7
Telephone	9 2 11	10 18 5
Printing, Stationery and Sundries ..	38 12 5	42 7 1
Alterations, &c., King Street Premises ..	..	268 9 10
Total Expenditure	£3216 17 0	£3027 9 2
INCOME.		
Sale of Milk, Virol, &c.	3205 19 8	2467 9 10
Proportion of Salary of Manageress charged to Maternity and Child Welfare Account ..	151 4 8	150 0 0
Total Income	£3357 4 4	£2617 9 10
Net Surplus	£140 7 4	—
Net Deficiency	—	£409 19 4

ALFRED RILEY,

City Treasurer.

20th June, 1931.

TABLE 21. City of Leicester.

HOME PLACE SANATORIUM, HOLT.

Income and Expenditure for the Two Years ending
31st March, 1931.

EXPENDITURE.	1929-30.			Year 1930-31.		
	£	s.	d.	£	s.	d.
Salaries and Wages	330	11	8	394	10	11
Superannuation : Corporation's Contributions	8	9	7	9	15	0
Insurance	23	11	11	24	2	9
Medical Attendance	84	11	9	100	0	0
Wages of Engineer and Gardeners	395	8	4	425	18	4
Rates and Land Tax	88	0	5	94	3	11
Fuel, Light and Water	121	9	9	176	14	9
Provisions	628	9	4	759	7	3
Medical Requisites	8	16	11	14	14	6
Laundry	33	17	11	22	18	0
Buildings, &c.—Repairs and Painting	76	5	5	237	12	3
Upkeep of Grounds, &c. (excluding Wages)	167	12	6	163	14	0
Transport	55	16	3	43	0	1
Travelling Expenses of Committee and Officials	53	2	0	74	12	4
Miscellaneous	182	13	5	204	15	0
Total Expenditure	£2258	17	2	£2745	19	1
INCOME.						
Sale of Pigs	59	10	0	68	0	0
Garden Produce (including supplies to Institution)	123	18	1	120	19	3
Miscellaneous	1	0	0	..		
Total Income	£184	8	1	£188	19	3
Net Cost	£2074	9	1	£2556	19	10

ALFRED RILEY,
City Treasurer.

20th June, 1931.

TABLE 22.

Monthly Rainfall and mean Temperature during 1930,
as recorded at the City Mental Hospital.

Figures supplied by Dr. J. Francis Dixon.

MONTH.				Rainfall in inches.	Mean Temperature Fahr.
January	..	..	..	3.32	41.64
February	..	..	..	0.82	35.46
March	..	..	..	2.31	40.96
April	..	..	..	2.74	45.90
May	..	..	..	2.69	51.00
June	..	..	..	1.22	59.76
July	..	..	..	3.86	59.54
August	..	..	..	3.53	60.54
September	..	..	..	3.95	55.96
October	..	..	..	2.17	50.61
November	..	..	..	2.79	41.90
December	..	..	..	2.04	38.16

Total rainfall in 1930 31.44 inches.

No. of days on which rain fell (.01 inches or more) .. 200

Rainfall in previous years.

				Inches of rain	No. of days on which rain fell
1929	..	..	..	25.52	.. 260
1928	..	..	..	26.41	.. 210
1927	..	..	..	32.59	.. 210
1926	..	..	..	26.78	.. 186
1925	..	..	..	23.06	.. 175
1924	..	..	..	28.49	.. 198
1923	..	..	..	25.03	.. 201
1922	..	..	..	29.23	.. 187
1921	..	..	..	19.03	.. 136
1920	..	..	..	25.10	.. 192
1919	..	..	..	30.98	.. 191
1918	..	..	..	24.52	.. 190

TABLE 23.

Showing Births, Vaccinations and Smallpox in Leicester, 1838-1930.

Year	Births	Vaccina- tions Regist'd Public and Pvt.	Small- pox Deaths	Small- pox Cases	Year	Births	Vaccina- tions Regist'd Public and Pvt.	Exemp- tions Granted	Small- pox Deaths	Small- pox Cases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1838	1815	Not known	11	..	1884	4851	1763	..	..	6
1839	2024	..	50	..	1885	4683	1842	..	..	8
1840	1967	..	56	..	1886	4863	1122	..	..	1
1841	1972	..	31	..	1887	4695	471	..	..	10
1842	1942	..	..	..	1888	4814	314	..	..	22
1843	2035	..	..	..	1889	4796	172	..	..	..
1844	2087	..	9	..	1890	4699	131	..	..	..
1845	2197	..	164	..	1891	4790	92	..	..	..
1846	2213	..	12	..	1892	5816	133	..	6	38
1847	2005	..	1	..	1893	6006	249	..	15	320
1848	2003	..	31	..	1894	5995	133	..	..	8
1849	2171	1613	66	..	1895	5962	75	..	..	4
1850	2239	1240	5	..	1896	6212	86	..	..	..
1851	2137	1292	2	..	1897	6252	81	..	..	..
1852	2387	1637	52	..	1898	6152	92	..	..	..
1853	2283	1843	11	..	1899	6273	156	167	..	..
1854	2467	2275	..	..	1900	6207	343	598	..	..
1855	2301	1771	..	..	1901	6169	357	500	..	4
1856	2402	1771	1	..	1902	6313	1237	1500	5	18
1857	2441	1880	17	..	1903	6018	2487	1029	21	406
1858	2276	2026	53	..	1904	5981	1232	1044	4	307
1859	2518	1447	3	..	1905	5888	987	1112	..	5
1860	2567	1766	2	..	1906	5865	1073	1080	..	1
1861	2540	1614	1	..	1907	5534	1093	1256	..	..
1862	2723	1388	..	..	1908	5680	659	2401	..	..
1863	2937	1608	5	..	1909	5431	660	2367	..	..
1864	3114	1916	104	..	1910	5380	564	2335	..	..
1865	3226	1183	10	..	1911	5222	475	2964	..	..
1866	3412	1641	3	..	1912	5182	447	3173	..	..
1867	3496	1544	2	..	1913	5278	436	3391	..	1
1868	3588	3379	1	..	1914	5144	293	3438	..	..
1869	3760	3560	..	..	1915	4851	192	3812	..	..
1870	3799	3103	..	..	1916	4684	222	3931	..	..
				Not	1917	3688	193	3287	..	..
1871	3982	3230	12	known	1918	3246	146	2724	..	..
1872	4162	4456	346	..	1919	3774	154	2954	..	..
1873	4447	3692	2	..	1920	5905	201	5364	..	..
1874	4374	3764	..	..	1921	5097	234	4662	..	..
1875	4270	3527	1	1	1922	4646	173	4286	..	..
1876	4781	3426	..	..	1923	4593	284	4109	..	..
1877	4753	3653	6	12	1924	4468	260	4052	..	5
1878	4779	3372	1	8	1925	4197	283	3908	..	72
1879	4697	3146	..	..	1926	4119	234	3710	..	..
1880	4860	2886	..	1	1927	3965	172	3684	..	7
1881	4712	3417	2	6	1928	3988	192	3712	..	90
1882	4857	3106	5	29	1929	3747	192	3517	..	320
1883	4825	1958	3	12	1930	3872	186	3825	1	1192

The figures in this Table prior to the year 1890 are taken from the Fourth Report of the Royal Commission on Vaccination, App. 3, Tables 5, 6 and 51

In 1863-64, owing to the Smallpox epidemic which prevailed, there were 4,320 additional public vaccinations performed by the Medical Officers to the Guardians. These were chiefly vaccinations of children omitted in previous years. They are not included in the figures for the two years in question.

TABLE 24.

Vital Statistics of the 38 Large Towns (excluding London and residential towns round London) with populations of over 100,000, 1930.

TOWN.	Population for 1929.	Birth Rate.	Death Rate.	Infant Mortality.	Diphtheria Death Rate.
*Brighton	146,800	13.3	12.1	51	0.07
Portsmouth	242,000	16.3	11.5	57	0.07
*Southampton	172,300	18.5	11.8	59	0.18
*Norwich	124,900	15.7	10.9	45	0.06
*Plymouth	199,000	16.0	12.5	61	0.12
Bristol	391,145	15.7	11.2	59	0.11
Stoke-on-Trent	279,190	19.8	11.7	71	0.04
*Wolverhampton	134,300	18.1	10.6	64	0.08
*Walsall	100,100	20.6	10.7	67	0.12
Birmingham	968,500	17.8	10.8	62	0.10
*Coventry	162,100	15.2	10.2	57	0.25
Nottingham	266,800	17.0	12.7	76	0.13
*Derby	140,500	17.1	11.2	71	0.16
*Stockport	127,800	13.8	11.4	53	0.08
*Birkenhead	157,600	17.8	11.1	85	0.15
Liverpool	869,500	21.7	12.7	81	0.26
*St. Helens	109,200	21.5	11.2	79	0.04
*Bolton	181,500	13.8	12.0	67	0.02
*Manchester	746,500	17.2	12.8	78	0.08
Salford	235,600	16.5	12.3	75	0.13
*Oldham	142,500	13.3	13.3	67	0.11
*Southend-on-Sea	114,600	12.9	9.8	37	0.04
*Blackburn	125,300	12.7	12.7	84	0.09
*Preston	126,100	15.7	11.8	68	0.06
*Huddersfield	113,100	13.3	13.0	56	0.09
Bradford	294,605	15.1	13.4	73	0.07
Leeds	478,500	15.8	12.2	66	0.11
Sheffield	518,000	15.1	10.6	66	0.04
Hull	307,500	20.6	12.4	71	0.15
Middlesbrough	133,100	24.8	12.9	80	0.06
*Sunderland	184,000	23.1	13.4	79	0.07
*South Shields	119,600	20.0	12.5	91	0.10
Gateshead	122,600	21.4	12.3	88	0.03
Newcastle-on-Tyne	283,400	18.4	12.1	71	0.01
Cardiff	224,000	16.9	11.2	72	0.13
*Rhondda	153,100	16.1	10.7	84	0.22
*Swansea	162,700	18.2	11.4	65	0.06
Average	—	17.2	11.5	68	0.10
†LEICESTER	245,200	15.8	11.0	55	0.03

* Provisional figures only. From Registrar-General's Quarterly Return No. 328.

† These differ slightly from the corresponding figures calculated locally and used in the rest of this report.

TABLE 25.

HOUSING CONDITIONS

For year ended 31st December, 1930.

GENERAL STATISTICS.

Area (acres)	8,582
Population (1929)	245,200
Number of inhabited houses (1921)	54,657
Number of families or separate occupiers (1921)	
Rateable Value, 1st November, 1930	£1,596,567
(Reduced figure owing to de-rating: provisional)	
Sum represented by a penny rate	£6,261 4s. 8d.

HOUSING.

Number of new houses erected during the year:—

(a) Total	1,088
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority	—
(ii) By other bodies or persons	—

1.—Unfit Dwelling Houses—Inspection.

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	6,648
(2) Number of dwelling houses which were inspected and recorded under the Housing Consolidated Regulations, 1925	471
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	2
(4) Number of dwelling houses (exclusive to those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation	469

2.—Remedy of Defects without Service of Formal Notices.

Number of defective dwelling houses rendered fit in consequence of informal action by Local Authority or their officers	1,527
---	-------

3.—Action under Statutory Powers.

A—*Proceedings under Section 3 of the Housing Act, 1925.*

(1) Number of dwelling houses in respect of which Notices were served requiring repairs	25
(2) Number of dwelling houses which were rendered fit after service of formal notices :	
(a) By owners	15
(b) By Local Authority in default of owners	—
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	0

B—*Proceedings under Public Health Acts.*

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	6,177
(2) Number of dwelling houses in which defects were remedied after service of formal notices :—	
(a) By owners	184
(b) By Local Authority in default of owners	7

C—*Proceedings under Section 11 of the Housing Act, 1925.*

(1) Number of representations made with a view to the making of Closing Orders ..	1
(2) Number of dwelling houses in respect of which Closing Orders were made ..	1
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ..	0
(4) Number of dwelling houses in respect of which Demolition Orders were made ..	9
(5) Number of dwelling houses demolished in pursuance of Demolition Orders ..	44

TABLE 26.

ALTITUDE ABOVE SEA LEVEL AT DIFFERENT POINTS
IN THE CITY OF LEICESTER.

						Feet above sea level.
North Evington Infirmary (just outside City Boundary)						330
Victoria Park .. .. .	..	..	..	..	..	293
University College .. .. .	..	..	..	..	..	286
Gilroes Cemetery .. .. .	..	..	..	..	..	285
Western Park .. .. .	..	..	..	..	..	271
Braunstone Park .. .. .	..	..	..	..	..	267
Spinney Hill Park .. .. .	..	..	..	..	..	264
Welford Road Cemetery .. .. .	..	..	..	..	..	258
Isolation Hospital, Groby Road .. .. .	..	..	..	..	..	258
Mental Hospital .. .. .	..	..	..	..	..	244
Park Estate Building Site (Saffron Lane) .. .. .	..	..	..	..	..	220-250
Abbey Park .. .. .	..	..	..	..	..	175
Belgrave .. .. .	..	..	..	..	..	165

The above levels are taken from "spot" levels written in Ordnance Survey Plans. Data supplied by City Surveyor.

TABLE 27.

LIST OF REGISTERED NURSING HOMES

(INCLUDING MATERNITY HOMES.)

ADDRESS.	No. OF BEDS.
9 Mere Road	1
13 Beckingham Road	5
Central Nursing Home, 33 Severn Street ..	6
40 Farnham Street	2
229 Melton Road	7
Home of Twilight Sleep, 3 Elmfield Avenue ..	10
49 St. Barnabas' Road	2
56 Clarendon Park Road	9
32 Narborough Road	2
193 Narborough Road	9
66 Uppingham Road	4
2 Melbourne Street	1
"Coneston," Thoresby Street	2
38 Cromford Street	1
Maternity Hospital, Causeway Lane	26
58 Loughborough Road	6
348 Aylestone Road	11
Sundial Nursing Home, Aylestone Road ..	12
10 Shaftesbury Road	1
22 Vicarage Lane	3
337 Fosse Road North	11
51 Melton Avenue	2
18 Ashleigh Road	4

TABLE 28.

DIPHTHERIA IN LEICESTER.

Cases notified and details registered during each quarter during years 1923-30. (From Registrar General's Quarterly Report).

Year	Quarter			Cases	Deaths	Case Mortality %
1923	First .. ..	..	..	27	3	11.1
	Second .. ..	..	..	37	1	2.7
	Third .. ..	..	..	26	1	3.8
	Fourth .. ..	..	..	41	5	12.2
1924	First .. ..	..	..	57	7	12.3
	Second .. ..	..	..	36	5	13.8
	Third .. ..	..	..	76	7	9.2
	Fourth .. ..	..	..	252	14	5.5
1925	First .. ..	..	..	152	11	7.2
	Second .. ..	..	..	76	8	10.5
	Third .. ..	..	..	38	4	10.5
	Fourth .. ..	..	..	81	9	11.1
1926	First .. ..	..	..	94	18	19.1
	Second .. ..	..	..	92	12	13.0
	Third .. ..	..	..	82	4	4.8
	Fourth .. ..	..	..	99	4	4.4
1927	First .. ..	..	..	73	7	9.5
	Second .. ..	..	..	42	0	—
	Third .. ..	..	..	61	2	3.2
	Fourth .. ..	..	..	136	2	1.4
1928	First .. ..	..	..	134	5	3.7
	Second .. ..	..	..	84	7	8.3
	Third .. ..	..	..	138	6	4.3
	Fourth .. ..	..	..	107	2	1.8
1929	First .. ..	..	..	56	2	3.5
	Second .. ..	..	..	42	5	11.9
	Third .. ..	..	..	48	2	4.1
	Fourth .. ..	..	..	107	4	3.7
1930	First .. ..	..	..	74	3	4.0
	Second .. ..	..	..	35	1	2.8
	Third .. ..	..	..	45	1	2.2
	Fourth .. ..	..	..	44	2	4.5

TABLE 29.

Deaths during 1930 of Persons belonging to City of Leicester as classified by the Medical Officer of Health according to Disease, Sex and Age-period.

CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	1407	125	18	24	28	59	154	378	364	257
	F	1337	91	15	13	33	64	156	338	279	348
1. Enteric fever	M	..	..	..	..	..	..	..	..	..	..
	F	1	..	..	..	..	..	..	1	..	..
2. Smallpox	M	1	1	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..
3. Measles	M	1	1	..	..	..	..	..	..	..	..
	F	4	2	..	1	1	..	..	..	..	..
4. Scarlet fever	M	..	..	..	..	..	..	..	..	..	..
	F	2	..	1	1	..	..	..	..	..	..
5. Whooping cough	M	3	3	..	..	..	..	..	..	..	..
	F	5	3	2	..	..	..	..	..	..	..
6. Diphtheria	M	3	..	..	2	1	..	..	..	..	..
	F	4	..	..	1	3	..	..	..	..	..
7. Influenza	M	12	..	..	..	1	..	..	4	3	4
	F	15	1	..	..	..	..	1	4	3	6
8. Encephalitis lethargica	M	5	..	..	..	..	1	2	..	2	..
	F	3	..	..	..	1	..	1	1	..	..
9. Meningococcal meningitis	M	3	1	..	..	1	..	..	..	1	..
	F	5	2	..	..	1	..	1	1	..	..
10. Tuberculosis of respiratory system	M	137	2	1	3	1	19	60	46	3	2
	F	90	1	..	..	2	30	38	17	2	..
11. Other tuberculous diseases	M	24	3	1	5	6	4	3	2	..	..
	F	20	2	2	1	6	3	2	4	..	..
12. Cancer, malignant disease	M	162	..	..	..	..	1	5	50	84	22
	F	210	..	..	..	..	..	24	99	56	31
13. Rheumatic fever	M	2	..	..	..	1	..	..	..	1	..
	F	4	..	..	..	1	1	..	1	1	..
14. Diabetes	M	17	..	..	..	..	..	..	6	8	3
	F	14	..	..	..	..	..	..	5	7	2
15. Cerebral hæmorrhage, &c.	M	127	..	..	..	..	2	6	29	54	36
	F	155	..	..	..	..	1	4	45	49	59
16. Heart disease	M	173	2	..	..	5	7	14	58	46	41
	F	205	2	..	..	6	6	16	54	56	65
17. Arterio-sclerosis	M	25	..	..	..	..	..	..	4	11	10
	F	16	..	..	..	..	..	..	..	2	14

TABLE 29 —continued.

CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—
18. Bronchitis	M	82	2	1	..	..	..	2	18	35	24
	F	70	2	..	1	..	..	1	13	23	30
19. Pneumonia (all forms)	M	127	14	5	7	1	4	20	40	21	15
	F	79	7	6	4	2	2	10	17	16	15
20. Other respiratory diseases	M	10	..	..	..	..	1	2	1	4	2
	F	7	..	..	..	1	..	1	..	1	4
21. Ulcer of stomach or duodenum	M	15	..	..	..	..	..	1	12	1	1
	F	10	..	..	..	..	..	..	6	4	..
22. Diarrhoea, &c.	M	20	13	1	..	..	..	2	..	..	4
	F	13	11	1	..	..	..	..	1	..	..
23. Appendicitis and typhlitis	M	16	..	..	1	..	6	5	4	..	..
	F	12	..	..	..	1	3	4	4	..	..
24. Cirrhosis of liver	M	12	..	..	..	..	..	1	5	6	..
	F	4	..	..	..	..	..	2	2	..	..
25. Acute and chronic nephritis	M	66	..	..	..	1	1	4	20	26	14
	F	55	..	..	1	1	2	7	15	16	13
26. Puerperal sepsis	M	..	..	..	..	..	..	..	..	..	..
	F	8	..	..	..	..	2	6	..	..	..
27. Other accidents and diseases of pregnancy and parturition	M	1	1	..	..	..	..	..	..	..	..
	F	14	1	..	..	..	4	9	..	..	..
28. Congenital debility and malformation, premature birth	M	81	76	4	1	..	..	..	..	..	..
	F	54	53	1	..	..	..	..	..	..	..
29. Suicide	M	27	..	..	..	..	2	7	14	3	1
	F	17	..	..	..	..	1	8	5	2	1
30. Other deaths from violence	M	57	2	5	3	4	9	8	13	7	6
	F	26	2	1	3	1	3	4	4	4	4
31. Other defined dis- eases	M	198	4	..	2	6	2	12	52	48	72
	F	215	2	1	..	6	6	17	38	37	107
32. Causes ill-defined or unknown	M	..	..	..	..	..	..	..	..	..	..
	F	1	..	..	..	..	..	..	1	..	..

TABLE 30.

Milk and Cream Regulations.

(Return required by the Ministry of Health).

						No. of Samples examined for the presence of Preservative.	No. in which Preservative was reported to be present.
Milk	896	0
Cream	26	0

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